

United States
Department of
Agriculture

Natural
Resources
Conservation
Service

In cooperation with
Benewah Soil and Water
Conservation District; Idaho Soil
Conservation Commission;
Coeur d'Alene Tribe; and
University of Idaho, College of
Agriculture

Soil Survey of Benewah County Area, Idaho, Western Part



How To Use This Soil Survey

General Soil Map

The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

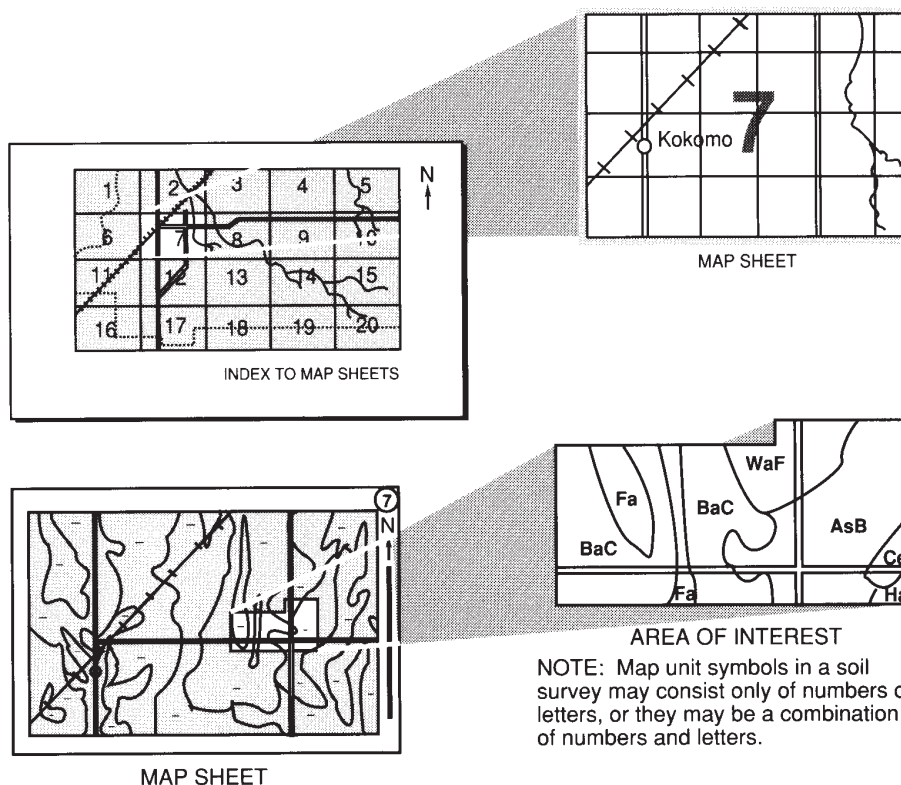
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the Benewah Soil and Water Conservation District; Idaho Soil Conservation Commission; Coeur d'Alene Tribe; and University of Idaho, College of Agriculture. The survey is part of the technical assistance furnished to the Benewah Soil and Water Conservation District.

Major fieldwork for this soil survey was completed in 2007. Soil names and descriptions were approved in 2013. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2007. The most current official data are available at <http://websoilsurvey.nrcs.usda.gov/app/>. The soil information in this soil survey supercedes and replaces the information in the Soil Survey of Benewah County Area, Idaho, published in 1980 (USDA, 1980).

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover Caption

View from Plummer Peninsula in Heyburn State Park, looking northeast across Chatcolet Lake toward the basalt plateaus and canyons on the Benewah-Kootenai County line. Blinn and Bobbitt soils are in the forested area in the foreground, along the shoreline north of Plummer Point, and in the forested area in the background. Lacy soils and Rock outcrop are in the areas of rangeland in the background.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at <http://www.nrcs.usda.gov>.

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Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. Farmers, ranchers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

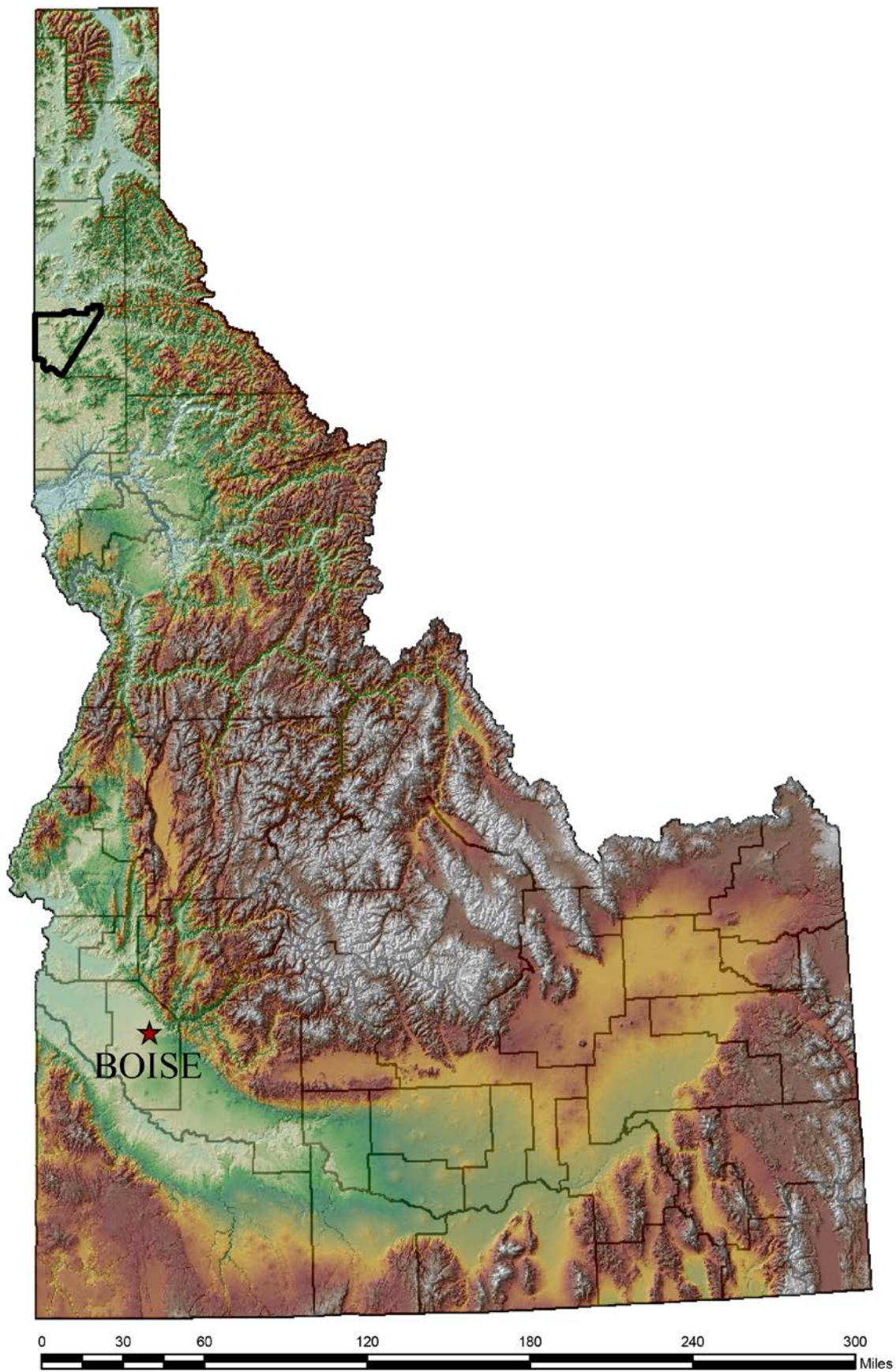
Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app>) or your NRCS State Soil Scientist (<http://www.nrcs.usda.gov/wps/portal/nrcs/sitenav/national/states/>).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each map unit is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Curtis Elke
State Conservationist
Natural Resources Conservation Service



Location of Benewah County Area, Idaho, Western Part.

Soil Survey of Benewah County Area, Idaho, Western Part

By Allyson Young, Natural Resources Conservation Service

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Conservation Service

United States Department of Agriculture, Natural Resources
Conservation Service,
in cooperation with
Benewah Soil and Water Conservation District; Idaho
Soil Conservation Commission; Coeur d'Alene Tribe; and
University of Idaho, College of Agriculture

BENEWAH COUNTY AREA, IDAHO, WESTERN PART, is in the northern part of Idaho, in the panhandle. It includes the western half of Benewah County. The survey area has a total of 238,240 acres, or 372 square miles. St. Maries is the county seat, and it has a population of 2,400 (2010 census).

The survey area is dominantly private land, but it includes some land administered by the State of Idaho and the Coeur d'Alene Tribe. A large part of the survey area is within the Coeur d'Alene Indian Reservation. Much of the area consists of forested mountainous and hilly terrain and narrow valleys used mainly for timber production, wildlife habitat, and recreation. An undulating, hilly prairie region, called the "Palouse," in the western part of the survey area has been cleared for crop production and hay and pasture. The major valleys are those of the western part of the St. Joe River and Minnaloosa and Benewah Creeks. Other major drainageways include the Hangman and Moctileme Creek systems.

Elevation ranges from 2,125 feet at Chatcolet Lake to 5,412 feet on Roundtop Mountain, in the northeastern part of the survey area. The average elevation in the western prairie area is about 2,700 feet.

The soils in the survey area formed in residual, colluvial, alluvial, and eolian parent material. The parent material on the mountains is dominantly residuum and colluvium derived from Precambrian metasedimentary rock. The parent material in the canyons and on escarpments is dominantly residuum and colluvium derived from Miocene basalt flows. Most of the soils that formed in residuum and colluvium have a high content of rock fragments and varying amounts of surficial loess and volcanic ash. The volcanic ash is dominantly silt-sized material that originated from many active volcanoes in the Cascade Range. The greatest contribution of ash was from the eruption of Mount Mazama about 7,000 years ago. Soils on the dissected terraces formed in varying amounts of loess, old alluvial deposits, and volcanic ash. Soils on the Palouse Prairie and hills formed in thick layers of loess deposited during the Holocene. Soils in the river valleys and stream terraces formed mainly in relatively recent silty alluvial deposits.

General Nature of the Survey Area

This section provides general information about the survey area. It describes history and development, geology, and climate.

History and Development

Catholic missionaries settled in the St. Joe River Valley in 1846 and at DeSmet, in the western part of Benewah County, in 1877. The missionaries worked mainly with the Coeur d'Alene Indians on their reservation. Settlement began after the completion of Mullan Road in 1860, but most settlers came to the area after the discovery of gold near St. Maries in 1880. The main influx of people began around 1900, when it became possible to acquire land as a timber claim. Settlement increased as lumbering became an important industry.

After the establishment of the Coeur d'Alene Indian Reservation, settlement was comparatively rapid. Much of the land within the reservation is currently leased, although some is farmed by Indians. Most of the population reside in the towns and communities, but some live on farms scattered throughout the forested areas.

Benewah County was organized in 1915 from portions of Kootenai County, and it was named after a chief of the Coeur d'Alene Tribe. St. Maries is the largest city. Other cities and communities include Plummer, Fernwood, Tensed, Sanders, and Santa. The population of these communities has fluctuated with the lumber industry.

Transportation is provided by railroads, highways, and waterways. Several railroads serve the northern and eastern parts of the county, and river boats navigate the St. Joe River as far as St. Joe City. U.S. Highway 95 runs north and south through Plummer. Other State highways run mainly east and west. Graded roads, many of which were built for logging, extend along the principal streams in the forested areas of the county.

Geology

By Paul Pedone, geologist, Natural Resources Conservation Service.

The survey area is in the Northern Rocky Mountains geomorphic province. The geology of the area encompasses approximately 1.4 billion years, from the Precambrian middle Proterozoic to the Holocene. The Precambrian rock exposed in the survey area was originally sediment deposited in a shallow marine basin. Over hundreds of millions of years, the unconsolidated sand, silt, and clay was deeply buried and metamorphosed by heat and pressure. Over many more millions of years, the rock was uplifted and is now exposed as the quartzite, siltstone, and argillite that makes up the Belt Series Supergroup. Most of the mountains and foothills in the area are underlain by these types of rock.

About 16 million years ago, during the middle of the Miocene, eruptions of flood basalt lava created the formations known regionally as the Columbia River Basalt Group. Many of these basalt flows occurred along fissure vents, and they filled in the low areas and stream valleys of the pre-existing landscape. Today, this basaltic rock generally is best exposed along deeply incised stream valleys in the survey area. The lava flows frequently blocked the older drainage systems and created temporary lakes where contemporaneous sediment was deposited. The Grand Ronde Basalt Formation and units of the Eckler Mountain Member and the Priest Rapids Member, both of which are part of the Wanapum Basalt Formation, are in the survey area. Tectonic forces created the mountains and uplifted, faulted, and gently folded the basalt and older metamorphosed sedimentary rock. Between episodes of fissure eruptions and depositions of flood basalt, long intervals of time lapsed during which stream drainageways were established and soil formation processes occurred. Soils formed in

Tertiary material that consists of both older alluvial deposits and weathered flood basalt and older geologic units.

During the last 2 million years (Pleistocene), continental and mountain glaciation produced fine glacial sediment that was deposited on broad glaciofluvial (outwash) plains. This bare sediment was easily eroded and transported by wind, and some was redeposited as thick layers of loess across the survey area. Some of the loess also contained ash from volcanic eruptions in the Cascade Mountains of western Washington and Oregon.

Significant loess was produced when a series of outburst floods from Glacial Lake Missoula swept through the area of present-day Coeur d'Alene. Backwater flooded the valleys of Lake Coeur d'Alene and the St. Joe and St. Maries Rivers.

The youngest geologic material in the area is volcanic ash from eruptions of Mount Mazama approximately 7,000 years ago and the eruption of Mount St. Helens in 1980 and recent alluvial deposits along the flood plains and channels of the major streams.

The St. Joe Fault is a significant right-lateral, strike-slip fault trending west-northwest and cutting through the area just north of St. Maries, near the county line. There is no evidence that this fault has been active within the last 10,000 years.

Climate

By the National Water and Climate Center, Natural Resources Conservation Service, Portland, Oregon.

The climate tables were created from data recorded at the St. Maries, Idaho, climate station. Thunderstorm days, relative humidity, percent sunshine, and wind information are estimated from First Order station in Spokane, Washington.

[Table 1](#) gives data on temperature and precipitation for the survey area as recorded at St. Maries in the period 1971 to 2000. [Table 2](#) shows probable dates of the first freeze in fall and the last freeze in spring. [Table 3](#) provides data on the length of the growing season.

In winter, the average temperature is 30.9 degrees F and the average daily minimum temperature is 25.0 degrees. The lowest temperature on record, which occurred at St. Maries on December 30, 1968, is -29.0 degrees. In summer, the average temperature is 64.8 degrees and the average daily maximum temperature is 80.0 degrees. The highest temperature, which occurred at St. Maries on August 4, 1961, is 109.0 degrees.

Growing degree days are shown in table 1. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total average annual precipitation is 29.97 inches. Of this, 7.81 inches, or 26 percent, usually falls in May through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 3.07 inches at St. Maries on December 26, 1980. Thunderstorms occur on about 12 days each year, and most occur in June.

The average seasonal snowfall is 50.3 inches. The greatest snow depth at any one time during the period of record was 70.0 inches recorded on February 4, 1943. On an average, 50 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 14.0 inches recorded on January 25, 1982.

The average relative humidity in mid-afternoon is about 52 percent. Humidity is higher at night, and the average at dawn is about 79 percent. The sun shines 75 percent of the time in summer and 31 percent of the time in winter. The prevailing wind is from the southwest. Average windspeed is highest, 10 miles per hour, in April.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils in this survey area were mapped and correlated according to the concepts and limits of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA. The survey area encompasses three MLRAs—Northern Rocky Mountains (MLRA 43A), Palouse and Nez Perce Prairies (MLRA 9), and Northern Rocky Mountain Valleys (MLRA 44A). Each detailed soil map unit is correlated to one of these MLRAs. It is identified in the map unit descriptions.

The soils and miscellaneous areas in the survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and

under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

General Soil Map Units

The general soil map in this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one map unit can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

Soils on Mountain Slopes and Hills of Mountains and Foothills

1. Honeyjones-Ardenvoir-Huckle

Deep and very deep, very gently sloping to steep, well drained soils

Percentage of survey area: 21 percent

Landform: Honeyjones—mountain slopes; Ardenvoir—mountain slopes, hills;
Huckle—mountain slopes

Elevation: 2,190 to 4,800 feet

Frost-free period: 80 to 140 days

Mean annual precipitation: 25 to 42 inches

Minor components: Ahrs, Arson, Cassyhill, Hugus, Lotuspoint, McCrosket, Rasser,
and Saint Maries soils

Major uses: Wildlife habitat, watershed, timber production

2. Ardenvoir-Lotuspoint-Cassyhill

Shallow to deep, very gently sloping to very steep, well drained soils

Percentage of survey area: 8 percent ([fig. 1](#))

Landform: Ardenvoir—mountain slopes, hills; Lotuspoint—mountain slopes;
Cassyhill—mountain slopes

Elevation: 2,080 to 4,840 feet



Figure 1.—Area 3 miles northeast of St. Maries. Area of Kingspeak ashy silt loam, dry, 5 to 30 percent slopes, on lacustrine terraces in foreground; Ardenvoir, dry-Cassihill complex, 35 to 65 percent slopes, on foothills in middle; and Cassihill very gravelly ashy silt loam, 35 to 65 percent slopes, on mountain slopes in background.

Frost-free period: 90 to 140 days

Mean annual precipitation: 25 to 40 inches

Minor components: Ahrs, Arson, Huckle, McCrosket, Pinecreek, Rasser, and Saint Maries soils

Major uses: Wildlife habitat, watershed, timber production

3. Arson-Benewah-Rasser

Deep and very deep, very gently sloping to steep, moderately well drained and well drained soils

Percentage of survey area: 9 percent

Landform: Arson—hills, mountain slopes; Benewah—hills; Rasser—hills, mountain slopes

Elevation: 2,250 to 3,720 feet

Frost-free period: 90 to 130 days

Mean annual precipitation: 23 to 37 inches

Minor components: Ardenvoir, Carlinton, Grangemont, Lotuspoint, Lovell, Minaloosa, Rasser, Santa, and Sinkler soils

Major uses: Wildlife habitat, watershed, timber production

Soils in Canyons, on Escarpments, and on Structural Benches of Basalt Plateaus

4. Lacy-Blinn-Seddow-Sly

Shallow to very deep, very gently sloping to very steep, well drained soils

Percentage of survey area: 8 percent

Landform: Lacy—escarpments, structural benches, canyons; Blinn—escarpments, structural benches, canyons; Seddow—structural benches, canyons; Sly—escarpments, structural benches, canyons

Elevation: 2,100 to 3,100 feet

Frost-free period: 90 to 140 days

Mean annual precipitation: 25 to 30 inches

Minor components: Agatha, Bobbitt, Grangemont, Reggear, Santa, and Shayhill soils

Major uses: Wildlife habitat, watershed, timber production

Soils on Hills of Foothills and Basalt Plateaus

5. Taney-Carlinton-Santa

Moderately deep to a fragipan, very gently sloping to strongly sloping, moderately well drained soils

Percentage of survey area: 18 percent

Landform: Taney, Carlinton, Santa—hills

Elevation: 2,550 to 3,650 feet

Frost-free period: 90 to 130 days

Mean annual precipitation: 25 to 34 inches

Minor components: Arson, Benewah, Grangemont, Latahco, Lovell, Reggear, Setters, Sharptop, and Southwick soils

Major uses: Wildlife habitat, watershed, timber production, nonirrigated cropland, pasture

6. Reggear-Hobo-Threebear

Moderately deep to a fragipan and very deep, very gently sloping to strongly sloping, moderately well drained soils

Percentage of survey area: 10 percent

Landform: Reggear, Hobo, Threebear—hills

Elevation: 2,380 to 3,660 feet

Frost-free period: 80 to 120 days

Mean annual precipitation: 26 to 35 inches

Minor components: Benewah, Grangemont, Hugus, Lovell, Porrett, Santa, Sharptop, Sly, and Stewah soils

Major uses: Wildlife habitat, watershed, timber production, pasture

Soils on Hills of Basalt Plateaus

7. Southwick-Larkin-Driscoll

Very deep, very gently sloping to strongly sloping, moderately well drained and well drained soils

Percentage of survey area: 11 percent

Landform: Southwick, Larkin, Driscoll—hills

Elevation: 2,500 to 3,100 feet

Frost-free period: 100 to 130 days

Mean annual precipitation: 20 to 28 inches

Minor components: Cald, Garfield, Latahco, and Taney soils

Major uses: Watershed, nonirrigated cropland, pasture

8. Naff-Thatuna-Palouse

Very deep, nearly level to strongly sloping, moderately well drained and well drained soils

Percentage of survey area: 5 percent ([fig. 2](#))

Landform: Naff, Thatuna, Palouse—hills

Elevation: 2,500 to 2,900 feet

Frost-free period: 100 to 140 days

Mean annual precipitation: 18 to 23 inches

Minor components: Cald, Caldwell, Garfield, Latah, and Tilma soils

Major uses: Watershed, nonirrigated cropland, pasture



Figure 2.—Cropland 1.5 miles southeast of Willard, near the Idaho-Washington State line. Area of Tilma-Latah complex, 0 to 8 percent slopes, in foreground, and Naff-Thatuna complex, 3 to 8 percent slopes, in background.

Soils on Flood Plains, Stream Terraces, and Drainageways of River Valleys and on Basalt Plateaus and Hills

9. Latahco-Lovell-Cald

Very deep, level to nearly level, poorly drained and somewhat poorly drained soils on basalt plateaus and hills

Percentage of survey area: 7 percent

Landform: Latahco—stream terraces, drainageways; Lovell—flood plains, drainageways; Cald—flood plains, drainageways

Elevation: 2,150 to 3,020 feet

Frost-free period: 90 to 140 days

Mean annual precipitation: 18 to 30 inches

Minor components: Caldwell and Driscoll soils; Endoaquolls; Endoaquepts; Garfield, Larkin, Latah, Palouse, Southwick, Taney, and Thatuna soils

Major uses: Wildlife habitat, watershed, pasture

10. Miesen-Ramsdell-Bellslake

Very deep, level to nearly level, very poorly drained and somewhat poorly drained soils in river valleys

Percentage of survey area: 1 percent

Landform: Miesen—flood plains; Ramsdell—flood plains; Bellslake—flood plains, depressions

Elevation: 2,120 to 2,150 feet

Frost-free period: 90 to 120 days

Mean annual precipitation: 26 to 30 inches

Minor components: DeVoignes soils, Fluvaquents, Pywell soils, Udifluvents

Major uses: Wildlife habitat, watershed, pasture

Water

Percentage of survey area: 2 percent

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Minor soil components that have properties similar to those of the dominant soil or soils in the map unit do not affect use and management. They are called noncontrasting, or similar, components. They typically are not mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. The soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name

of a soil phase commonly indicates a feature that affects use or management. For example, Larkin silt loam, 3 to 12 percent slopes, is a phase of the Larkin series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or associations.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Larkin-Driscoll complex, 12 to 25 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Honeyjones-Ahrs association, 35 to 75 percent slopes, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Pits, gravel, is an example.

Each detailed soil map unit is assigned to a major land resource area (MLRA) (USDA Agriculture Handbook 296). The MLRA assigned to each detailed soil map unit is given in this section. Some map units, such as Rock outcrop, Water, and other miscellaneous areas, may not be assigned to a single MLRA because the unit can occur in any MLRA.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

105—Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,150 to 2,250 feet

Mean annual precipitation: 26 to 32 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Aquic Udifluvents, protected, and similar soils: 45 percent

Typic Fluvaquents, protected, and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Aquic Udifluvents, Protected

Setting

Landform: Stream terraces, flood plains

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Mixed alluvium

Slope range: 0 to 4 percent

Soil Survey of Benewah County Area, Idaho, Western Part

Depth to restrictive feature: 22 to 30 inches to strongly contrasting textural stratification

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 20 to 40 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

A—0 to 8 inches; silt loam

Bw—8 to 22 inches; gravelly silt loam

2C—22 to 60 inches; extremely cobbly loamy coarse sand

Characteristics of Typic Fluvaquents, Protected

Setting

Landform: Depressions, flood plains

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Mixed alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 4 to 18 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

A—0 to 9 inches; silt loam

Cg1 and Cg2—9 to 27 inches; silt loam and very fine sandy loam

2Cg3—27 to 60 inches; extremely cobbly fine sandy loam

Dissimilar Minor Components

DeVoignes soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Miesen soils, protected

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Ramsdell soils, protected

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

116—Thatuna-Caldwell complex, 0 to 4 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,650 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Thatuna and similar soils: 45 percent

Caldwell and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 2 to 4 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Characteristics of Caldwell

Setting

Landform: Hills, drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess and/or silty alluvium

Slope range: 0 to 3 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 16 to 21 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 12 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4w

Ecological site: LOAMY BOTTOM 16-24 PZ (R009XY402WA)

Typical profile

Ap1—0 to 4 inches; silt loam

Ap2—4 to 10 inches; silt loam

A1—10 to 16 inches; silt loam

A2—16 to 21 inches; silt loam

AB—21 to 30 inches; silt loam

Bw—30 to 40 inches; silt loam

Bt1—40 to 52 inches; silt loam

Bt2—52 to 60 inches; silt loam

Dissimilar Minor Components

Cald soils

Percentage of map unit: 10 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Latah soils

Percentage of map unit: 5 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

Palouse soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Rock outcrop

Description of areas: Small areas consisting of nearly vertical rock cliffs, along Hangman Creek

118—Thatuna-Cald complex, 0 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,800 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Thatuna and similar soils: 50 percent

Cald and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Footslopes, toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Characteristics of Cald

Setting

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess and/or silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 11 to 13 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: WET MEADOW 16-24 PZ (R009XY601WA)

Typical profile

Ap1—0 to 7 inches; silt loam
Ap2—7 to 13 inches; silt loam
Ab—13 to 17 inches; silt loam
Ab/Bgb—17 to 25 inches; stratified silt loam to very fine sandy loam
Bgb1—25 to 40 inches; silt loam
Bgb2—40 to 48 inches; silt loam
Btgb—48 to 60 inches; silty clay loam

Dissimilar Minor Components

Caldwell soils

Percentage of map unit: 10 percent
Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Down-slope shape: Linear
Across-slope shape: Concave

Latah soils

Percentage of map unit: 5 percent
Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Down-slope shape: Linear
Across-slope shape: Concave

Palouse soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslopes, toeslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Rock outcrop

Description of areas: Small areas consisting of nearly vertical rock cliffs, along Hangman Creek

120—Latahco silt loam, 0 to 2 percent slopes

Map Unit Setting

General landscape: Hills
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 2,500 to 2,890 feet
Mean annual precipitation: 22 to 28 inches
Mean annual air temperature: 41 to 46 degrees F
Frost-free period: 95 to 130 days

Map Unit Composition

Latahco and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Latahco

Setting

Landform: Drainageways, low terraces
Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 16 to 21 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: DRY MEADOW (R009XY019ID)

Typical profile

Ap and A—0 to 13 inches; silt loam

E—13 to 20 inches; silt loam

E/B and Bt—20 to 26 inches; silty clay loam

Btk and Btkc—26 to 42 inches; silty clay loam

Btb—42 to 51 inches; silt loam

Cc—51 to 62 inches; silt loam

Dissimilar Minor Components

Lovell soils

Percentage of map unit: 10 percent

Landform: Drainageways, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Endoaquolls

Percentage of map unit: 8 percent

Landform: Drainageways, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Concave

Southwick soils

Percentage of map unit: 2 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

121—Latahco-Lovell complex, 0 to 3 percent slopes

Map Unit Setting

General landscape: Hills

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,890 feet

Mean annual precipitation: 22 to 28 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Latahco and similar soils: 60 percent

Lovell and similar soils: 30 percent

Dissimilar minor components: 10 percent

Characteristics of Latahco

Setting

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 0 to 3 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 16 to 21 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: DRY MEADOW (R009XY019ID)

Typical profile

Ap and A—0 to 13 inches; silt loam

E—13 to 20 inches; silt loam

E/B and Bt—20 to 26 inches; silty clay loam

Btk and Btkc—26 to 42 inches; silty clay loam

Btb—42 to 51 inches; silt loam

Cc—51 to 62 inches; silt loam

Characteristics of Lovell

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 8 to 26 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 8 inches; ashy silt loam

Eg—8 to 18 inches; ashy silt loam

EBtg—18 to 22 inches; silt loam

Bt—22 to 34 inches; silt loam

2Bt—34 to 51 inches; loam

2BC—51 to 60 inches; loam

Dissimilar Minor Components

Endoaquolls

Percentage of map unit: 8 percent

Landform: Drainageways, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Concave

Southwick soils

Percentage of map unit: 2 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

122—Tilma-Latah complex, 0 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,700 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Tilma and similar soils: 45 percent
Latah and similar soils: 40 percent
Dissimilar minor components: 15 percent

Characteristics of Tilma

Setting

Landform: Hills
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (range): All aspects

Properties and Qualities

Parent material: Loess
Slope range: 2 to 8 percent
Depth to restrictive feature: 21 to 31 inches to abrupt textural change
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 18 to 25 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 11 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w
Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam
A—8 to 14 inches; silt loam
Bw—14 to 20 inches; silt loam
E—20 to 23 inches; silt loam
Btb1—23 to 30 inches; silty clay
Btb2—30 to 34 inches; silty clay
Btb3—34 to 42 inches; silty clay
Btb4—42 to 60 inches; silt loam

Characteristics of Latah

Setting

Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (range): All aspects

Properties and Qualities

Parent material: Loess
Slope range: 0 to 3 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4w

Ecological site: WET MEADOW 16-24 PZ (R009XY601WA)

Typical profile

Ap—0 to 10 inches; silt loam

A—10 to 14 inches; silt loam

BA—14 to 19 inches; silt loam

E—19 to 22 inches; silt loam

Btgb1—22 to 31 inches; silty clay loam

Btgb2—31 to 38 inches; silty clay loam

Btb—38 to 60 inches; silty clay loam

Dissimilar Minor Components

Cald soils

Percentage of map unit: 5 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Caldwell soils

Percentage of map unit: 5 percent

Landform: Hills, drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

Thatuna soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas consisting of nearly vertical rock cliffs, along Hangman Creek

124—Caldwell-Cald complex, 0 to 3 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,300 to 2,650 feet
Mean annual precipitation: 18 to 23 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 135 days

Map Unit Composition

Caldwell and similar soils: 60 percent
Cald and similar soils: 25 percent
Dissimilar minor components: 15 percent

Characteristics of Caldwell

Setting

Landform: Hills, drainageways
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (range): All aspects

Properties and Qualities

Parent material: Loess and/or silty alluvium
Slope range: 0 to 3 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: Occasional (see Water Features table)
Ponding frequency: None
Seasonal high water table (minimum depth): About 16 to 21 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 12 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4w
Ecological site: LOAMY BOTTOM 16-24 PZ (R009XY402WA)

Typical profile

Ap1—0 to 4 inches; silt loam
Ap2—4 to 10 inches; silt loam
A1—10 to 16 inches; silt loam
A2—16 to 21 inches; silt loam
AB—21 to 30 inches; silt loam
Bw—30 to 40 inches; silt loam
Bt1—40 to 52 inches; silt loam
Bt2—52 to 60 inches; silt loam

Characteristics of Cald

Setting

Landform: Flood plains
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (range): All aspects

Properties and Qualities

Parent material: Loess and/or silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 11 to 13 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: WET MEADOW 16-24 PZ (R009XY601WA)

Typical profile

Ap1—0 to 7 inches; silt loam

Ap2—7 to 13 inches; silt loam

Ab—13 to 17 inches; silt loam

Ab/Bgb—17 to 25 inches; stratified silt loam to very fine sandy loam

Bgb1—25 to 40 inches; silt loam

Bgb2—40 to 48 inches; silt loam

Btgb—48 to 60 inches; silty clay loam

Dissimilar Minor Components

Endoaquolls

Percentage of map unit: 10 percent

Landform: Drainageways, stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Linear

Thatuna soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Latah soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex, linear

Across-slope shape: Linear, concave

Rock outcrop

Description of areas: Small areas consisting of nearly vertical rock cliffs, along Hangman and Little Hangman Creeks

125—Lovell-Porrett-Aquandic Endoaquepts complex, 0 to 3 percent slopes

Map Unit Setting

General landscape: Hills

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Lovell and similar soils: 55 percent

Porrett and similar soils: 20 percent

Aquandic Endoaquepts and similar soils: 15 percent

Dissimilar minor components: 10 percent

Characteristics of Lovell

Setting

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 0 to 3 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 8 to 26 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 8 inches; ashy silt loam

Eg—8 to 18 inches; ashy silt loam

EBtg—18 to 22 inches; silt loam

Bt—22 to 34 inches; silt loam

2Bt—34 to 51 inches; loam

2BC—51 to 60 inches; loam

Characteristics of Porrett

Setting

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at the soil surface to a depth of 4 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 3 inches; ashy silt loam

E1 and E2—3 to 14 inches; ashy silt loam

E3 and E4—14 to 21 inches; silt loam

Bt—21 to 60 inches; silty clay loam

Characteristics of Aquandic Endoaquepts

Setting

Landform: Stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Mixed alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: 30 to 48 inches to strongly contrasting textural stratification

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 5 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

A and AB—0 to 11 inches; ashy silt loam

Bw—11 to 40 inches; silt loam

2C—40 to 60 inches; silt loam over extremely gravelly loam

Dissimilar Minor Components

Aquic Udifluvents

Percentage of map unit: 8 percent

Landform: Stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Endoaquolls

Percentage of map unit: 2 percent

Landform: Drainageways, stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Concave

130—Porrett ashy silt loam, 0 to 2 percent slopes

Map Unit Setting

General landscape: Hills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,500 to 3,050 feet

Mean annual precipitation: 25 to 32 inches

Mean annual air temperature: 41 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Porrett and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Porrett

Setting

Landform: Drainageways, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at the soil surface to a depth of 4 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 3 inches; ashy silt loam

E1 and E2—3 to 14 inches; ashy silt loam

E3 and E4—14 to 21 inches; silt loam

Bt—21 to 60 inches; silty clay loam

Dissimilar Minor Components

Lovell soils

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Concave

Across-slope shape: Linear

Aquandic Endoaquepts

Percentage of map unit: 5 percent

Landform: Stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

Aquic Udifluvents

Percentage of map unit: 2 percent

Landform: Stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

136—Lovell-Porrett complex, 0 to 2 percent slopes

Map Unit Setting

General landscape: Hills ([fig. 3](#))

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,500 to 3,020 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days



Figure 3.—Area of Lovell-Porrett complex, 0 to 2 percent slopes, on a flood plain near the old Benewah schoolhouse, along Benewah Creek. Benewah-Rasser complex, 5 to 15 percent slopes, on cutover hillslopes in middle, and Benewah-Rasser complex, 15 to 35 percent slopes, on forested hillslopes in background.

Map Unit Composition

Lovell and similar soils: 45 percent

Porrett and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Lovell

Setting

Landform: Flood plains

Geomorphic position (three-dimensional): Risers

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 8 to 26 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 8 inches; ashy silt loam

Eg—8 to 18 inches; ashy silt loam

EBtg—18 to 22 inches; silt loam

Bt—22 to 34 inches; silt loam

2Bt—34 to 51 inches; loam

2BC—51 to 60 inches; loam

Characteristics of Porrett

Setting

Landform: Drainageways, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at the soil surface to a depth of 4 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 3 inches; ashy silt loam

E1 and E2—3 to 14 inches; ashy silt loam

E3 and E4—14 to 21 inches; silt loam

Bt—21 to 60 inches; silty clay loam

Dissimilar Minor Components

Aquandic Endoaquepts

Percentage of map unit: 8 percent

Landform: Stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear

Endoaquolls

Percentage of map unit: 4 percent

Landform: Drainageways, stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Concave

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

141—Miesen ashy silt loam, 0 to 2 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Miesen and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Miesen

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 24 to 40 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Typical profile

A1—0 to 12 inches; ashy silt loam

A2 and A3—12 to 32 inches; silt loam

Bw—32 to 60 inches; silt loam

Dissimilar Minor Components

Miesen soils, moderately well drained

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Bellslake soils

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Ramsdell soils

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

142—Miesen-Ramsdell complex, 0 to 2 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Miesen and similar soils: 45 percent

Ramsdell and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Miesen

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 1 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 24 to 40 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Typical profile

A1—0 to 12 inches; ashy silt loam

A2 and A3—12 to 32 inches; silt loam

Bw—32 to 60 inches; silt loam

Characteristics of Ramsdell

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): At the soil surface to a depth of 12 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 8 inches; ashy silt loam

Bg—8 to 35 inches; very fine sandy loam over silt loam

Cg—35 to 60 inches; silt loam

Dissimilar Minor Components

Miesen soils, moderately well drained

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Bellslake soils

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

143—Miesen ash silt loam, protected, drained, 0 to 2 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Miesen, protected, drained, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Miesen, Protected, Drained

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 24 to 40 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Typical profile

A1—0 to 12 inches; ashy silt loam

A2 and A3—12 to 32 inches; silt loam

Bw—32 to 60 inches; silt loam

Dissimilar Minor Components

Ramsdell soils, protected, drained

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Bellslake soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Miesen soils, moderately well drained

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

144—Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Miesen, protected, drained, and similar soils: 50 percent

Ramsdell, protected, drained, and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Miesen, Protected, Drained

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 1 to 4 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 24 to 40 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Typical profile

A1—0 to 12 inches; ashy silt loam

A2 and A3—12 to 32 inches; silt loam

Bw—32 to 60 inches; silt loam

Characteristics of Ramsdell, Protected, Drained

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 4 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 8 inches; ashy silt loam

Bg—8 to 35 inches; very fine sandy loam over silt loam

Cg—35 to 60 inches; silt loam

Dissimilar Minor Components

Miesen soils, moderately well drained

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Bellslake soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

145—Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,140 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Bellslake, protected, drained, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Bellslake, Protected, Drained

Setting

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium over herbaceous organic material

Slope range: 0 to 1 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): At the soil surface to a depth of 12 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 14 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 5 inches; ashy silt loam

Ag—5 to 11 inches; ashy silt loam

Bgb1—11 to 23 inches; silt loam

Bgb2—23 to 32 inches; silt loam

Agb—32 to 40 inches; silt loam

Oa/Agb—40 to 47 inches; stratified muck to silt loam

Oa1—47 to 55 inches; muck

Oa2—55 to 62 inches; muck

Dissimilar Minor Components

Ramsdell soils, protected, drained

Percentage of map unit: 7 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

DeVoignes soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Pywell soils, protected, drained

Percentage of map unit: 5 percent

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Miesen soils, protected, drained

Percentage of map unit: 3 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

150—Pywell muck, protected, drained, 0 to 1 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,140 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Pywell, protected, drained, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Pywell, Protected, Drained

Setting

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Herbaceous organic material over woody organic material

Slope range: 0 to 1 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): At the soil surface to a depth of 12 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 15.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Oa1 and Oa2—0 to 16 inches; muck

Oa3 and Oa4—16 to 65 inches; muck

Dissimilar Minor Components

Bellslake soils, protected, drained

Percentage of map unit: 8 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

DeVoignes soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Ramsdell soils, protected, drained

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Miesen soils, protected, drained

Percentage of map unit: 2 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

155—Ramsdell ashy silt loam, 0 to 2 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ramsdell and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Ramsdell

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): At the soil surface to a depth of 12 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 8 inches; ashy silt loam

Bg—8 to 35 inches; very fine sandy loam over silt loam

Cg—35 to 60 inches; silt loam

Dissimilar Minor Components

Bellslake soils

Percentage of map unit: 8 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Miesen soils

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

DeVoignes soils

Percentage of map unit: 3 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Pywell soils

Percentage of map unit: 2 percent

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Water

Percentage of map unit: 2 percent

156—Ramsdell ashy silt loam, protected, drained, 0 to 2 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ramsdell, protected, drained, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Ramsdell, Protected, Drained

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 4 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 8 inches; ashy silt loam

Bg—8 to 35 inches; very fine sandy loam over silt loam

Cg—35 to 60 inches; silt loam

Dissimilar Minor Components

Miesen soils, protected, drained

Percentage of map unit: 10 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Bellslake soils, protected, drained

Percentage of map unit: 5 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

DeVoignes soils, protected, drained

Percentage of map unit: 3 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Pywell soils, protected, drained

Percentage of map unit: 2 percent

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

**157—Ramsdell-DeVoignes complex, protected, drained,
0 to 2 percent slopes**

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ramsdell, protected, drained, and similar soils: 50 percent

DeVoignes, protected, drained, and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Ramsdell, Protected, Drained

Setting

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): About 4 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 8 inches; ashy silt loam

Bg—8 to 35 inches; very fine sandy loam over silt loam

Cg—35 to 60 inches; silt loam

Characteristics of DeVoignes, Protected, Drained

Setting

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Stratified herbaceous organic material over mixed alluvium

Slope range: 0 to 1 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Occasional (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): At the soil surface to a depth of 12 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 9 inches; mucky silt loam

Oa/C—9 to 24 inches; stratified muck to silt loam or silty clay loam

2Cg—24 to 60 inches; silty clay loam

Dissimilar Minor Components

Bellslake soils, protected, drained

Percentage of map unit: 10 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Miesen soils, protected, drained

Percentage of map unit: 8 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Convex

Across-slope shape: Linear

Pywell soils, protected, drained

Percentage of map unit: 2 percent

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

158—DeVoignes-Pywell complex, 0 to 1 percent slopes

Map Unit Setting

General landscape: River valleys

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Elevation: 2,120 to 2,140 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

DeVoignes and similar soils: 45 percent

Pywell and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of DeVoignes

Setting

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Stratified herbaceous organic material over mixed alluvium

Slope range: 0 to 1 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: Frequent (see Water Features table)

Seasonal high water table (minimum depth): At the soil surface to a depth of 10 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Ap—0 to 9 inches; mucky silt loam

Oa/C—9 to 24 inches; stratified muck to silt loam or silty clay loam

2Cg—24 to 60 inches; silty clay loam

Characteristics of Pywell

Setting

Landform: Flood plains, depressions

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Herbaceous organic material over woody organic material

Slope range: 0 to 1 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: Frequent (see Water Features table)

Seasonal high water table (minimum depth): At the soil surface (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 15.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Typical profile

Oa1 and Oa2—0 to 16 inches; muck

Oa3 and Oa4—16 to 65 inches; muck

Dissimilar Minor Components

Bellslake soils

Percentage of map unit: 10 percent

Landform: Depressions, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Linear, concave

Ramsdell soils

Percentage of map unit: 3 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Convex

Across-slope shape: Linear

Water

Percentage of map unit: 2 percent

200—Blinn ashy silt loam, 5 to 35 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,100 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Blinn, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Blinn, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 5 to 35 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; ashy silt loam

Bw1—6 to 12 inches; gravelly ashy silt loam

Bw2—12 to 24 inches; stony loam

C—24 to 39 inches; very stony loam

R—39 to 40 inches; bedrock

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 8 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Bobbitt soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Lacy soils, stony surface

Percentage of map unit: 3 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Santa soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Shayhill soils, dry, stony surface

Percentage of map unit: 2 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

201—Blinn ashy silt loam, 35 to 65 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,100 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Blinn, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Blinn, Stony Surface

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 35 to 65 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; ashy silt loam
Bw1—6 to 12 inches; gravelly ashy silt loam
Bw2—12 to 24 inches; stony loam
C—24 to 39 inches; very stony loam
R—39 to 40 inches; bedrock

Dissimilar Minor Components

Bobbitt soils, stony surface

Percentage of map unit: 8 percent
Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Agatha soils, cobbly surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Lacy soils, stony surface

Percentage of map unit: 3 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Dorb soils, warm, stony surface

Percentage of map unit: 2 percent
Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Shayhill soils, dry, stony surface

Percentage of map unit: 2 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

**202—Blinn-Bobbitt complex, 35 to 65 percent slopes,
stony**

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,100 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 43 to 49 degrees F

Frost-free period: 95 to 130 days

Map Unit Composition

Blinn, stony surface, and similar soils: 55 percent

Bobbitt, stony surface, and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Blinn, Stony Surface

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 35 to 65 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; ashy silt loam
Bw1—6 to 12 inches; gravelly ashy silt loam
Bw2—12 to 24 inches; stony loam
C—24 to 39 inches; very stony loam
R—39 to 40 inches; bedrock

Characteristics of Bobbitt, Stony Surface

Setting

Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): West
Aspect (range): Southwest to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt
Slope range: 35 to 65 percent
Surface area covered with stones: 0.01 to 0.1 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 3.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 9 inches; stony ashy silt loam
Bt—9 to 23 inches; very stony clay loam
R—23 to 33 inches; bedrock

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Lacy soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Shayhill soils, dry, stony surface

Percentage of map unit: 3 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Dorb soils, warm, stony surface

Percentage of map unit: 2 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

**210—Agatha ashy silt loam, 5 to 35 percent slopes,
stony**

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Agatha, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Agatha, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): Southeast to south (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 5 to 35 percent

Surface area covered with stones: 0.01 to 0.1 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 7 inches; ashy silt loam
BA—7 to 11 inches; gravelly ashy silt loam
Bt1—11 to 20 inches; very gravelly silt loam
Bt2—20 to 32 inches; very gravelly loam
Bt3—32 to 38 inches; very cobbly loam
Bt4—38 to 43 inches; extremely cobbly clay loam
R—43 to 53 inches; bedrock

Dissimilar Minor Components

Bobbitt soils, stony surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Lacy soils, stony surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Seddow soils

Percentage of map unit: 5 percent
Landform: Structural benches, canyons
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear, convex
Across-slope shape: Convex

Sly soils, dry

Percentage of map unit: 3 percent
Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Santa soils

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

212—Agatha gravelly ashy silt loam, 35 to 65 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,150 to 3,000 feet
Mean annual precipitation: 28 to 30 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Agatha, stony surface, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Agatha, Stony Surface

Setting

Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): Southeast to south (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt
Slope range: 35 to 65 percent
Surface area covered with stones: 0.01 to 0.1 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 7 inches; gravelly ashy silt loam
BA—7 to 11 inches; gravelly ashy silt loam
Bt1—11 to 20 inches; very gravelly silt loam
Bt2—20 to 32 inches; very gravelly loam
Bt3—32 to 38 inches; very cobbly loam
Bt4—38 to 43 inches; extremely cobbly clay loam
R—43 to 53 inches; bedrock

Dissimilar Minor Components

Bobbitt soils, stony surface

Percentage of map unit: 10 percent
Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Lacy soils, stony surface

Percentage of map unit: 3 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Shayhill soils, dry, stony surface

Percentage of map unit: 3 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Dorb soils, warm, stony surface

Percentage of map unit: 2 percent
Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 2 percent

230—Lacy, stony-Rock outcrop complex, 5 to 35 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,130 to 2,950 feet
Mean annual precipitation: 25 to 30 inches

Soil Survey of Benewah County Area, Idaho, Western Part

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Lacy, stony surface, and similar soils: 65 percent

Rock outcrop: 15 percent

Dissimilar minor components: 20 percent

Characteristics of Lacy, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from basalt

Slope range: 5 to 35 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 2.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A1—2 to 3 inches; stony silt loam

A2—3 to 10 inches; stony silt loam

Bt1—10 to 14 inches; very stony silt loam

Bt2—14 to 17 inches; extremely stony loam

R—17 to 27 inches; bedrock

Characteristics of Rock Outcrop

Description of areas: Exposures of bare bedrock

Land capability subclass: 8

Dissimilar Minor Components

Bobbitt soils, stony surface

Percentage of map unit: 10 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Seddow soils

Percentage of map unit: 5 percent
Landform: Structural benches, canyons
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear, convex
Across-slope shape: Convex

Carlinton soils, dry

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Convex
Across-slope shape: Linear

Benewah soils

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Linear

231—Lacy, very stony-Rock outcrop complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,150 to 3,000 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 100 to 140 days

Map Unit Composition

Lacy, very stony surface, and similar soils: 60 percent
Rock outcrop: 25 percent
Dissimilar minor components: 15 percent

Characteristics of Lacy, Very Stony Surface

Setting

Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from basalt

Slope range: 35 to 65 percent

Surface area covered with stones: 0.1 to 3.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 1.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A1—1 to 2 inches; stony loam

A2—2 to 4 inches; stony loam

AB—4 to 8 inches; very stony loam

Bt1—8 to 16 inches; very stony loam

Bt2—16 to 19 inches; extremely stony clay loam

R—19 to 29 inches; bedrock

Characteristics of Rock Outcrop

Description of areas: Exposures of bare bedrock

Land capability subclass: 8

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Blinn soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Bobbitt soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

232—Lacy-Bobbitt complex, 5 to 35 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,130 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Lacy, stony surface, and similar soils: 55 percent

Bobbitt, stony surface, and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Lacy, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from basalt

Slope range: 5 to 35 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 2.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A1—2 to 3 inches; stony silt loam

A2—3 to 10 inches; stony silt loam

Bt1—10 to 14 inches; very stony silt loam

Bt2—14 to 17 inches; extremely stony loam

R—17 to 27 inches; bedrock

Characteristics of Bobbitt, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 5 to 35 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 9 inches; stony ashy silt loam

Bt—9 to 23 inches; very stony clay loam

R—23 to 33 inches; bedrock

Dissimilar Minor Components

Carlinton soils, dry

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Convex

Across-slope shape: Linear

Seddow soils

Percentage of map unit: 5 percent

Landform: Structural benches, canyons

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Benewah soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Percentage of map unit: 2 percent

**233—Lacy-Bobbitt complex, 35 to 65 percent slopes,
very stony**

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,120 to 3,100 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Lacy, very stony surface, and similar soils: 55 percent

Bobbitt, very stony surface, and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Lacy, Very Stony Surface

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from basalt

Slope range: 35 to 65 percent

Surface area covered with stones: 0.1 to 3.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 1.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
A1—1 to 2 inches; stony loam
A2—2 to 4 inches; stony loam
AB—4 to 8 inches; very stony loam
Bt1—8 to 16 inches; very stony loam
Bt2—16 to 19 inches; extremely stony clay loam
R—19 to 29 inches; bedrock

Characteristics of Bobbitt, Very Stony Surface

Setting

Landform: Canyons, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt
Slope range: 35 to 65 percent
Surface area covered with stones: 0.1 to 3.0 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 4.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; stony ashy loam
AB—4 to 11 inches; stony ashy loam
Bt1—11 to 15 inches; very cobbly loam
Bt2—15 to 27 inches; very cobbly loam
Bt3—27 to 33 inches; extremely stony loam
R—33 to 43 inches; bedrock

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Blinn soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 5 percent

250—Dorb cobbly ashy silt loam, warm, 35 to 70 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,200 to 3,300 feet

Mean annual precipitation: 28 to 34 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 85 to 110 days

Map Unit Composition

Dorb, warm, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Dorb, Warm, Stony Surface

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from basalt

Slope range: 35 to 70 percent

Surface area covered with stones: 0.04 to 0.1 percent

Depth to restrictive feature: 40 to 60 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 8e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; cobbly ashy silt loam

Bw1 and Bw2—3 to 20 inches; cobbly ashy silt loam over very cobbly ashy loam

Bw3—20 to 32 inches; very cobbly loam

2BC—32 to 48 inches; extremely cobbly loam

2R—48 to 58 inches; bedrock

Dissimilar Minor Components

Shayhill soils, dry, stony surface

Percentage of map unit: 8 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Sly soils

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Bobbitt soils, stony surface

Percentage of map unit: 2 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

**255—Shayhill ashy silt loam, 15 to 40 percent slopes,
stony**

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Soil Survey of Benewah County Area, Idaho, Western Part

Elevation: 2,200 to 3,150 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Shayhill, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Shayhill, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 15 to 40 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 19 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 10 inches; ashy silt loam

Bw2—10 to 19 inches; cobbly silt loam

Bw3—19 to 28 inches; very stony silt loam

Bt—28 to 48 inches; extremely cobbly loam over very cobbly loam

BCt—48 to 55 inches; extremely stony loam

C—55 to 64 inches; extremely cobbly loam

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Blinn soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Kingspeak soils, cool

Percentage of map unit: 5 percent

Landform: Structural benches

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Shayhill soils, dry

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

256—Shayhill gravelly ashy silt loam, 35 to 65 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,400 to 3,100 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Shayhill, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Shayhill, Stony Surface

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 35 to 65 percent

Soil Survey of Benewah County Area, Idaho, Western Part

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 19 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; gravelly ashy silt loam

Bw1—3 to 10 inches; gravelly ashy silt loam

Bw2—10 to 19 inches; cobbly silt loam

Bw3—19 to 28 inches; very stony silt loam

Bt—28 to 48 inches; extremely cobbly loam over very cobbly loam

BCt—48 to 55 inches; extremely stony loam

C—55 to 64 inches; extremely cobbly loam

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Dorb soils, warm, stony surface

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Shayhill soils, dry

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Sly soils

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

257—Shayhill gravelly ashy silt loam, dry, 15 to 40 percent slopes, stony

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,200 to 3,000 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Shayhill, dry, stony surface, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Shayhill, Dry, Stony Surface

Setting

Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear, convex
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt
Slope range: 15 to 40 percent
Surface area covered with stones: 0.01 to 0.1 percent
Depth to restrictive feature: 19 to 30 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadleily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; gravelly ashy silt loam
Bw1—4 to 11 inches; cobbly ashy silt loam
Bw2—11 to 19 inches; cobbly silt loam
Bt—19 to 64 inches; very cobbly loam

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Blinn soils, stony surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Shayhill soils

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Sly soils, dry

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

260—Seddow ashy silt loam, 15 to 35 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,200 to 3,050 feet

Mean annual precipitation: 28 to 31 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Seddow and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Seddow

Setting

Landform: Structural benches, canyons

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Soil Survey of Benewah County Area, Idaho, Western Part

Aspect (representative): West

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/twinflower (CN590)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; ashy silt loam

Bw—6 to 10 inches; ashy silt loam

Bt1—10 to 16 inches; silt loam

2Bt2—16 to 24 inches; silt loam

2Bt3—24 to 32 inches; cobbly clay loam

2BCt—32 to 45 inches; very cobbly clay loam

2R—45 to 55 inches; bedrock

Dissimilar Minor Components

Agatha soils

Percentage of map unit: 8 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Sly soils, dry

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Bobbitt soils, stony surface

Percentage of map unit: 3 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Grangemont soils, warm

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Lacy soils, stony surface

Percentage of map unit: 2 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

261—Sly-Shayhill complex, dry, 30 to 60 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,500 to 3,000 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 115 days

Map Unit Composition

Sly, dry, and similar soils: 45 percent

Shayhill, dry, and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Sly, Dry

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess over colluvium derived from basalt

Slope range: 30 to 50 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

Bw—5 to 9 inches; ashy silt loam

Bt1 and Bt2—9 to 29 inches; silt loam

Bt3 and Bt4—29 to 60 inches; gravelly silt loam

Characteristics of Shayhill, Dry

Setting

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 30 to 60 percent

Depth to restrictive feature: 19 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw—3 to 11 inches; ashy silt loam

Bt1—11 to 19 inches; gravelly silt loam

Bt2—19 to 42 inches; extremely cobbly silt loam

BCt—42 to 55 inches; extremely cobbly loam

Dissimilar Minor Components

Agatha soils

Percentage of map unit: 8 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Seddow soils

Percentage of map unit: 3 percent

Landform: Structural benches, canyons

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear, convex

Across-slope shape: Convex

Bobbitt soils

Percentage of map unit: 2 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Kingspeak soils, cool

Percentage of map unit: 2 percent

Landform: Structural benches

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

262—Seddow-Sly, dry complex, 30 to 55 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,000 feet

Mean annual precipitation: 28 to 31 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Seddow and similar soils: 45 percent

Sly, dry, and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Seddow

Setting

Landform: Structural benches, canyons

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Soil Survey of Benewah County Area, Idaho, Western Part

Slope range: 30 to 55 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/twinflower (CN590)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; ashy silt loam
Bw—6 to 10 inches; ashy silt loam
Bt1—10 to 16 inches; silt loam
2Bt2—16 to 24 inches; silt loam
2Bt3—24 to 32 inches; cobbly clay loam
2BCt—32 to 45 inches; very cobbly clay loam
2R—45 to 55 inches; bedrock

Characteristics of Sly, Dry

Setting

Landform: Structural benches, canyons
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear, concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess over colluvium derived from basalt
Slope range: 30 to 50 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 11.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 5 inches; ashy silt loam

Bw—5 to 9 inches; ashy silt loam
Bt1 and Bt2—9 to 29 inches; silt loam
Bt3 and Bt4—29 to 60 inches; gravelly silt loam

Dissimilar Minor Components

Agatha soils

Percentage of map unit: 7 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Lacy soils, stony surface

Percentage of map unit: 5 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Bobbitt soils, stony surface

Percentage of map unit: 2 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 1 percent

300—Taney ashy silt loam, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 2,560 to 3,220 feet
Mean annual precipitation: 25 to 28 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Taney and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Taney

Setting

Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 8 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 16 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3s

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

BA—4 to 15 inches; ashy silt loam

Bw—15 to 22 inches; silt loam

Bt—22 to 29 inches; silt loam

EBc—29 to 31 inches; silt loam

Btxcb—31 to 53 inches; silty clay loam

Btxb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils, dry

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Latahco soils

Percentage of map unit: 5 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Setters soils

Percentage of map unit: 3 percent

Landform: Loess hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Southwick soils

Percentage of map unit: 2 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Summits, footslopes
Geomorphic position (three-dimensional): Interfluves, side slopes
Down-slope shape: Convex
Across-slope shape: Linear

301—Taney ashy silt loam, 8 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 2,570 to 3,280 feet
Mean annual precipitation: 25 to 28 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Taney and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Taney

Setting

Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southwest
Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 8 to 20 percent
Depth to restrictive feature: 23 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 16 to 22 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
BA—4 to 15 inches; ashy silt loam
Bw—15 to 22 inches; silt loam
Bt—22 to 29 inches; silt loam
EBc—29 to 31 inches; silt loam

Btxcb—31 to 53 inches; silty clay loam

Btxb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils, dry

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Setters soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 2 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

303—Carlinton-Benewah complex, 8 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,220 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Carlinton and similar soils: 45 percent

Benewah and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Carlinton

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Soil Survey of Benewah County Area, Idaho, Western Part

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 8 to 20 percent

Depth to restrictive feature: 21 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap1—0 to 5 inches; ashy silt loam

Ap2—5 to 10 inches; ashy silt loam

Bw—10 to 14 inches; silt loam

EBt—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

BtbxE—23 to 30 inches; silt loam

Btbx—30 to 53 inches; silty clay loam

Btb—53 to 60 inches; silty clay loam

Characteristics of Benewah

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 10 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap—0 to 6 inches; ashy silt loam

BE—6 to 15 inches; ashy silt loam

E—15 to 18 inches; silt loam

Bt1—18 to 23 inches; silty clay loam

Bt2—23 to 34 inches; silty clay loam

Bt3—34 to 60 inches; silty clay loam

Dissimilar Minor Components

Santa soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Taney soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Lovell soils

Percentage of map unit: 3 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Grangemont soils, warm

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

304—Benewah-Santa complex, 8 to 20 percent slopes

Map Unit Setting

General landscape: Foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Benewah and similar soils: 45 percent

Santa and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Benewah

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 10 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap—0 to 6 inches; ashy silt loam

BE—6 to 15 inches; ashy silt loam

E—15 to 18 inches; silt loam

Bt1—18 to 23 inches; silty clay loam

Bt2—23 to 34 inches; silty clay loam

Bt3—34 to 60 inches; silty clay loam

Characteristics of Santa

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 8 to 15 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 19 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

AB—4 to 9 inches; ashy silt loam

Bw—9 to 15 inches; silt loam

Ec—15 to 34 inches; silt loam

Btxb—34 to 44 inches; silty clay loam

Btxcb—44 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Sharptop soils

Percentage of map unit: 6 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Grangemont soils, warm

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

310—Santa ashy silt loam, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,610 to 3,000 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 100 to 120 days

Map Unit Composition

Santa and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Santa

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 8 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 19 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

AB—4 to 9 inches; ashy silt loam

Bw—9 to 15 inches; silt loam

Ec—15 to 34 inches; silt loam

Btxb—34 to 44 inches; silty clay loam

Btxcb—44 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Lovell soils

Percentage of map unit: 5 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Taney soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Reggear soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

311—Santa ashy silt loam, 8 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,630 to 3,050 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 100 to 120 days

Map Unit Composition

Santa and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Santa

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex
Aspect (representative): East
Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 8 to 20 percent
Depth to restrictive feature: 23 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 14 to 19 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
AB—4 to 9 inches; ashy silt loam
Bw—9 to 15 inches; silt loam
Ec—15 to 34 inches; silt loam
Btxb—34 to 44 inches; silty clay loam
Btxcb—44 to 60 inches; silty clay loam

Dissimilar Minor Components

Benewah soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Carlinton soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Linear

Sharptop soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Reggear soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

314—Sharptop-Santa complex, 8 to 20 percent slopes

Map Unit Setting

General landscape: Foothills, basalt plateaus ([fig. 4](#))

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,050 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Sharptop and similar soils: 45 percent

Santa and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Sharptop

Setting

Landform: Hills, structural benches

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 8 to 20 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7 inches)



Figure 4.—Area of Sharptop-Santa complex, 8 to 20 percent slopes, about 2 miles north of Plummer. Grangemont ashy silt loam, warm, 5 to 25 percent slopes, on a forested, north-facing, concave hillslope in background.

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/twinflower (CN590)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

Bw—4 to 9 inches; ashy silt loam

BtE—9 to 17 inches; silt loam

BtxbE1—17 to 27 inches; silt loam

BtxbE2—27 to 42 inches; silt loam

Btxb—42 to 49 inches; paragravelly silt loam

2Cr—49 to 59 inches; bedrock

Characteristics of Santa

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 8 to 15 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 19 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

AB—4 to 9 inches; ashy silt loam

Bw—9 to 15 inches; silt loam

Ec—15 to 34 inches; silt loam

Btxb—34 to 44 inches; silty clay loam

Btxcb—44 to 60 inches; silty clay loam

Dissimilar Minor Components

Benewah soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Carlinton soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Reggear soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

315—Setters silt loam, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,600 to 3,300 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Setters and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Setters

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 20 percent

Depth to restrictive feature: 21 to 30 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Ap—0 to 4 inches; silt loam

A and Bw—4 to 15 inches; silt loam

BE—15 to 19 inches; silt loam

E—19 to 22 inches; silt loam

Btcb—22 to 60 inches; silty clay

Dissimilar Minor Components

Taney soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Carlinton soils, dry

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Southwick soils

Percentage of map unit: 3 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes, interfluves

Down-slope shape: Convex

Across-slope shape: Linear

Latahco soils

Percentage of map unit: 2 percent

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

316—Setters-Taney complex, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,610 to 3,260 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Setters and similar soils: 50 percent

Taney and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Setters

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 20 percent

Depth to restrictive feature: 21 to 30 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Ap—0 to 4 inches; silt loam

A and Bw—4 to 15 inches; silt loam

BE—15 to 19 inches; silt loam

E—19 to 22 inches; silt loam

Btcb—22 to 60 inches; silty clay

Characteristics of Taney

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (representative): South

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 20 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 16 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
BA—4 to 15 inches; ashy silt loam
Bw—15 to 22 inches; silt loam
Bt—22 to 29 inches; silt loam
EBc—29 to 31 inches; silt loam
Btxcb—31 to 53 inches; silty clay loam
Btxb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils, dry

Percentage of map unit: 10 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, shoulders
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Linear

Southwick soils

Percentage of map unit: 5 percent
Landform: North-facing hillslopes
Geomorphic position (two-dimensional): Shoulders, footslopes
Geomorphic position (three-dimensional): Side slopes, interfluves
Down-slope shape: Convex
Across-slope shape: Linear

Tensed soils

Percentage of map unit: 3 percent
Landform: Hillslopes
Geomorphic position (two-dimensional): Summits
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Concave
Across-slope shape: Convex

Latahco soils

Percentage of map unit: 2 percent
Landform: Drainageways, low terraces
Geomorphic position (two-dimensional): Toeslopes
Down-slope shape: Linear
Across-slope shape: Linear

320—Reggear ashy silt loam, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,530 to 3,210 feet
Mean annual precipitation: 30 to 33 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Reggear and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Reggear

Setting

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): East

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 20 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BE—5 to 13 inches; ashy silt loam

Bt/E—13 to 24 inches; silt loam

E/Btx—24 to 28 inches; silt loam

Btxb—28 to 60 inches; silty clay loam

Dissimilar Minor Components

Reggear soils, moist

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Grangemont, soils warm

Percentage of map unit: 4 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Sharptop soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Santa soils

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Convex

Porrett soils

Percentage of map unit: 1 percent
Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Down-slope shape: Concave
Across-slope shape: Linear

321—Reggear ashy silt loam, moist, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,670 to 3,210 feet
Mean annual precipitation: 30 to 33 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Reggear, moist, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Reggear, Moist

Setting

Landform: Structural benches, hills
Geomorphic position (two-dimensional): Summits, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): East
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 3 to 20 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 5 inches; ashy silt loam
BE—5 to 9 inches; ashy silt loam
E—9 to 14 inches; silt loam
E/Bt—14 to 22 inches; silt loam
Btx/E—22 to 39 inches; silt loam
Btxb—39 to 60 inches; silt loam

Dissimilar Minor Components

Reggear soils

Percentage of map unit: 7 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Linear

Grangemont soils, warm

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Sly soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Threebear soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Linear

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

322—Reggear, moist-Sly complex, 3 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,100 feet

Mean annual precipitation: 30 to 33 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 100 days

Map Unit Composition

Reggear, moist and similar soils: 50 percent

Sly and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Reggear, Moist

Setting

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes, interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): East

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 25 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

A—2 to 5 inches; ashy silt loam

BE—5 to 9 inches; ashy silt loam

E—9 to 14 inches; silt loam
E/Bt—14 to 22 inches; silt loam
Btx/E—22 to 39 inches; silt loam
Btxb—39 to 60 inches; silt loam

Characteristics of Sly

Setting

Landform: Structural benches, hills
Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex, concave
Aspect (representative): Northeast
Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess over colluvium derived from basalt
Slope range: 10 to 25 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 11.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 5 inches; ashy silt loam
Bw—5 to 9 inches; ashy silt loam
Bt1 and Bt2—9 to 29 inches; silt loam
Bt3 and Bt4—29 to 60 inches; gravelly silt loam

Dissimilar Minor Components

Santa soils

Percentage of map unit: 8 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Convex

Grangemont soils, warm

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Shayhill soils

Percentage of map unit: 5 percent

Landform: Structural benches

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Porrett soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

323—Bechtel-Reggear complex, 15 to 40 percent slopes

Map Unit Setting

General landscape: Foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,510 to 3,660 feet

Mean annual precipitation: 30 to 33 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Bechtel and similar soils: 50 percent

Reggear and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Bechtel

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 20 to 40 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

BA—4 to 9 inches; ashy silt loam

Bt1—9 to 17 inches; silt loam

Bt2—17 to 26 inches; silt loam

Bt3—26 to 35 inches; very gravelly loam

BCt—35 to 56 inches; extremely gravelly loam

Cr—56 to 66 inches; bedrock

Characteristics of Reggear

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): Northeast to north (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 15 to 35 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BE—5 to 13 inches; ashy silt loam

Bt/E—13 to 24 inches; silt loam

E/Btx—24 to 28 inches; silt loam

Btxb—28 to 60 inches; silty clay loam

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Tigley soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Benewah soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Grangemont soils, warm

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

**325—Reggear-Sharptop, basalt substratum complex,
3 to 12 percent slopes**

Map Unit Setting

General landscape: Basalt plateaus, foothills ([fig. 5](#))
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,580 to 3,210 feet
Mean annual precipitation: 30 to 32 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Reggear and similar soils: 55 percent
Sharptop, basalt substratum, and similar soils: 30 percent
Dissimilar minor components: 15 percent

Characteristics of Reggear

Setting

Landform: Structural benches, hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (range): All aspects



Figure 5.—Cutover area of Reggear-Sharp top, basalt substratum complex, 3 to 12 percent slopes, near the Hells Gulch area, north of St. Maries. Sinkler-Arson complex, 10 to 40 percent slopes, on forested hillslopes in middle, and Arson-Lotuspoint complex, 10 to 40 percent slopes, on forested hillslopes in background.

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 12 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BE—5 to 13 inches; ashy silt loam

Bt/E—13 to 24 inches; silt loam

E/Btx—24 to 28 inches; silt loam

Btxb—28 to 60 inches; silty clay loam

Characteristics of Sharptop, Basalt Substratum

Setting

Landform: Hills, structural benches

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 3 to 12 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Grand fir/twinflower (CN590)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

Bw—4 to 9 inches; ashy silt loam

EB—9 to 12 inches; silt loam

Bt—12 to 19 inches; silt loam

Btx—19 to 27 inches; silt loam

2Bct1—27 to 41 inches; very paragravelly silt loam

2Bct2—41 to 47 inches; very paragravelly loam

2Crt—47 to 57 inches; bedrock

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Reggear soils, moist

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 3 percent

Landform: Hillslopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

326—Reggear-Seddow complex, 3 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,380 to 3,160 feet

Mean annual precipitation: 30 to 32 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Reggear and similar soils: 50 percent

Seddow and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Reggear

Setting

Landform: Structural benches

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): East

Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 25 percent

Depth to restrictive feature: 20 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BE—5 to 13 inches; ashy silt loam

Bt/E—13 to 24 inches; silt loam

E/Btx—24 to 28 inches; silt loam

Btxb—28 to 60 inches; silty clay loam

Characteristics of Seddow

Setting

Landform: Structural benches

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from basalt

Slope range: 3 to 25 percent

Depth to restrictive feature: 40 to 60 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/twinflower (CN590)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; ashy silt loam

Bw—6 to 10 inches; ashy silt loam

Bt1—10 to 16 inches; silt loam

2Bt2—16 to 24 inches; silt loam

2Bt3—24 to 32 inches; cobbly clay loam

2BCt—32 to 45 inches; very cobbly clay loam

2R—45 to 55 inches; bedrock

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Sharptop soils, basalt substratum

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Sinkler soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

330—Carlinton-Carlinton, dry complex, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,580 to 3,230 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Carlinton and similar soils: 50 percent

Carlinton, dry, and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Carlinton

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): Northwest
Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 3 to 20 percent
Depth to restrictive feature: 21 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 14 to 20 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap1—0 to 5 inches; ashy silt loam
Ap2—5 to 10 inches; ashy silt loam
Bw—10 to 14 inches; silt loam
EBt—14 to 20 inches; silt loam
E—20 to 23 inches; silt loam
BtbxE—23 to 30 inches; silt loam
Btbx—30 to 53 inches; silty clay loam
Btb—53 to 60 inches; silty clay loam

Characteristics of Carlinton, Dry

Setting

Landform: Hills
Geomorphic position (two-dimensional): Shoulders
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 3 to 20 percent
Depth to restrictive feature: 21 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 14 to 20 inches (see Water Features table)
Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Ap1—0 to 5 inches; ashy silt loam

Ap2—5 to 10 inches; ashy silt loam

Bw—10 to 14 inches; silt loam

EBt—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

BtbxE—23 to 30 inches; silt loam

Btbx—30 to 53 inches; silty clay loam

Btb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Lovell soils

Percentage of map unit: 8 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Taney soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 4 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

335—Carlinton ashy silt loam, dry, 8 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,700 to 3,230 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Carlinton, dry, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Carlinton, Dry

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 8 to 25 percent

Depth to restrictive feature: 21 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Ap1—0 to 5 inches; ashy silt loam

Ap2—5 to 10 inches; ashy silt loam

Bw—10 to 14 inches; silt loam

EBt—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

BtbxE—23 to 30 inches; silt loam

Btbx—30 to 53 inches; silty clay loam

Btb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Taney soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Santa soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

336—Carlinton, dry-Taney complex, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,560 to 3,020 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Carlinton, dry, and similar soils: 55 percent

Taney and similar soils: 25 percent

Dissimilar minor components: 20 percent

Characteristics of Carlinton, Dry

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 8 percent

Depth to restrictive feature: 21 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3s

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Ap1—0 to 5 inches; ashy silt loam

Ap2—5 to 10 inches; ashy silt loam

Bw—10 to 14 inches; silt loam

EBt—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

BtbxE—23 to 30 inches; silt loam

Btbx—30 to 53 inches; silty clay loam

Btb—53 to 60 inches; silty clay loam

Characteristics of Taney

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 8 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 16 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3s

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

BA—4 to 15 inches; ashy silt loam

Bw—15 to 22 inches; silt loam

Bt—22 to 29 inches; silt loam

EBc—29 to 31 inches; silt loam

Btxcb—31 to 53 inches; silty clay loam

Btxb—53 to 60 inches; silty clay loam

Dissimilar Minor Components

Carlinton soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Santa soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 2 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

340—Arson-Lotuspoint complex, 10 to 40 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,250 to 3,600 feet

Mean annual precipitation: 30 to 33 inches

Mean annual air temperature: 42 to 49 degrees F

Frost-free period: 90 to 130 days

Map Unit Composition

Arson and similar soils: 45 percent

Lotuspoint and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Arson

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone
Slope range: 10 to 40 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 8.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 5 inches; ashy silt loam
BA—5 to 9 inches; ashy silt loam
EBt—9 to 15 inches; silt loam
Bt1 and Bt2—15 to 38 inches; silt loam
2Bt3—38 to 43 inches; extremely gravelly silt loam
2BCt—43 to 57 inches; very gravelly silt loam
2Crt—57 to 67 inches; bedrock

Characteristics of Lotuspoint

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite
Slope range: 10 to 40 percent
Depth to restrictive feature: 20 to 40 inches to lithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Bechtel soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Sinkler soils

Percentage of map unit: 2 percent

Landform: Mountain slopes, hillslopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

341—Sinkler-Arson complex, 10 to 40 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,620 to 3,300 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Sinkler and similar soils: 45 percent

Arson and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Sinkler

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Southeast

Aspect (range): Northeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 10 to 35 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 0.5 inch; slightly decomposed plant material

Oe—0.5 to 1 inch; moderately decomposed plant material

A—1 to 6 inches; ashy silt loam

Bw—6 to 12 inches; ashy silt loam

EBt—12 to 20 inches; silt loam

BtE—20 to 28 inches; silt loam

Bt—28 to 38 inches; silt loam

Btb—38 to 51 inches; silt loam

Btxb—51 to 60 inches; silty clay loam

Characteristics of Arson

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 10 to 40 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BA—5 to 9 inches; ashy silt loam

EBt—9 to 15 inches; silt loam

Bt1 and Bt2—15 to 38 inches; silt loam

2Bt3—38 to 43 inches; extremely gravelly silt loam

2BCt—43 to 57 inches; very gravelly silt loam

2Crt—57 to 67 inches; bedrock

Dissimilar Minor Components

Benewah soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Sharptop soils

Percentage of map unit: 5 percent

Landform: Hillslopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Bechtel soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex, concave

Grangemont soils, warm

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave

342—Sinkler-Arson complex, dry, 10 to 40 percent slopes

Map Unit Setting

General landscape: Mountains, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,750 to 3,350 feet

Mean annual precipitation: 27 to 33 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Sinkler, dry, and similar soils: 45 percent

Arson, dry, and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Sinkler, Dry

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 10 to 30 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 8 inches; ashy silt loam

Bt—8 to 14 inches; silt loam

BtE—14 to 20 inches; silt loam

Btb1—20 to 33 inches; silty clay loam

Btb2—33 to 44 inches; silty clay loam

Btxbc—44 to 62 inches; silt loam

Characteristics of Arson, Dry

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 10 to 40 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 5 inches; ashy silt loam

BA—5 to 9 inches; ashy silt loam

EBt—9 to 15 inches; silt loam

Bt1 and Bt2—15 to 38 inches; silt loam

2Bt3—38 to 43 inches; extremely gravelly silt loam

2BCt—43 to 57 inches; very gravelly silt loam

2Crt—57 to 67 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Sinkler soils

Percentage of map unit: 2 percent

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks,
side slopes

Down-slope shape: Linear

Across-slope shape: Concave

350—Southwick ashy silt loam, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,530 to 3,020 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Southwick and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Southwick

Setting

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 32 inches (see
Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Forest Service habitat type: Ponderosa pine/ninebark (CN190)

Typical profile

Ap and A1—0 to 10 inches; ashy silt loam

A2 and A3—10 to 18 inches; silt loam

Bw—18 to 28 inches; silt loam

E—28 to 31 inches; silt loam

Btcxb—31 to 49 inches; silty clay loam

Btcb1—49 to 54 inches; silty clay loam

Btcb2—54 to 70 inches; silt loam

Dissimilar Minor Components

Larkin soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 6 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Driscoll soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Taney soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

351—Southwick ashy silt loam, 8 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,560 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Southwick and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Southwick

Setting

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 32 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/ninebark (CN190)

Typical profile

Ap and A1—0 to 10 inches; ashy silt loam

A2 and A3—10 to 18 inches; silt loam

Bw—18 to 28 inches; silt loam

E—28 to 31 inches; silt loam

Btcxb—31 to 49 inches; silty clay loam

Btcb1—49 to 54 inches; silty clay loam

Btcb2—54 to 70 inches; silt loam

Dissimilar Minor Components

Larkin soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Driscoll soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Cald soils

Percentage of map unit: 3 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Taney soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

353—Tensed-Pedee complex, 3 to 15 percent slopes

Map Unit Setting

General landscape: Foothills ([fig. 6](#))

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,580 to 3,080 feet

Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 125 days

Map Unit Composition

Tensed and similar soils: 50 percent

Pedee and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Tensed

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves, treads

Down-slope shape: Concave

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 3 to 15 percent

Depth to restrictive feature: 50 to 59 inches to strongly contrasting textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None



Figure 6.—Partially cutover area of Tensed-Pedee complex, 3 to 15 percent slopes, about 3.5 miles east of Tensed.

Seasonal high water table (minimum depth): Perched at about 22 to 24 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Douglas-fir/common snowberry (CN310)

Typical profile

A—0 to 7 inches; ashy silt loam

BA—7 to 12 inches; silt loam

EB—12 to 22 inches; gravelly silt loam

E—22 to 24 inches; gravelly loam

2Bt1 and 2Bt2—24 to 58 inches; very gravelly clay loam over clay loam

2Bt3—58 to 61 inches; very gravelly sandy clay loam

Characteristics of Pedee

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluvies, treads

Down-slope shape: Concave, convex

Across-slope shape: Convex, concave

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 3 to 15 percent

Depth to restrictive feature: 22 to 35 inches to strongly contrasting textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 24 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

A—0 to 10 inches; ashy silt loam

Bt—10 to 19 inches; gravelly silt loam

E—19 to 22 inches; very gravelly silt loam

2Bt1 and 2Bt2—22 to 31 inches; very gravelly clay

2Bt3—31 to 60 inches; very gravelly loam over extremely gravelly loam

Dissimilar Minor Components

Setters soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Taney soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Southwick soils

Percentage of map unit: 3 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes, interfluves

Down-slope shape: Convex

Across-slope shape: Linear

Latahco soils

Percentage of map unit: 2 percent

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

354—Tensed-Pedee complex, 15 to 35 percent slopes

Map Unit Setting

General landscape: Foothills

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,690 to 3,180 feet

Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Tensed and similar soils: 50 percent

Pedee and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Tensed

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 50 to 59 inches to strongly contrasting textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 22 to 24 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/common snowberry (CN310)

Typical profile

A—0 to 7 inches; ashy silt loam

BA—7 to 12 inches; silt loam

EB—12 to 22 inches; gravelly silt loam

E—22 to 24 inches; gravelly loam

2Bt1 and 2Bt2—24 to 58 inches; very gravelly clay loam over clay loam

2Bt3—58 to 61 inches; very gravelly sandy clay loam

Characteristics of Pedee

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 22 to 35 inches to strongly contrasting textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 24 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

A—0 to 10 inches; ashy silt loam

Bt—10 to 19 inches; gravelly silt loam

E—19 to 22 inches; very gravelly silt loam

2Bt1—22 to 31 inches; very gravelly clay

2Bt2 and 2Bt3—31 to 60 inches; very gravelly loam over extremely gravelly loam

Dissimilar Minor Components

Setters soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Convex

Taney soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Benewah soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Rasser soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

355—Southwick-Driscoll complex, 3 to 15 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,560 to 3,030 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Southwick and similar soils: 55 percent

Driscoll and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Southwick

Setting

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 15 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 32 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/ninebark (CN190)

Typical profile

Ap and A1—0 to 10 inches; ashy silt loam

A2 and A3—10 to 18 inches; silt loam

Bw—18 to 28 inches; silt loam

E—28 to 31 inches; silt loam

Btcxb—31 to 49 inches; silty clay loam

Btcb1—49 to 54 inches; silty clay loam

Btcb2—54 to 70 inches; silt loam

Characteristics of Driscoll

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 15 percent

Depth to restrictive feature: 25 to 35 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 28 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 10 inches; silt loam

AB—10 to 17 inches; silt loam

EBtc—17 to 24 inches; silt loam

Ec—24 to 26 inches; silt loam

Btb1—26 to 42 inches; silty clay

Btb2—42 to 49 inches; silty clay

Btb3—49 to 60 inches; silty clay loam

Dissimilar Minor Components

Larkin soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Garfield soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

356—Southwick-Driscoll complex, 15 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,650 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Southwick and similar soils: 55 percent

Driscoll and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Southwick

Setting

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (representative): Northwest

Aspect (range): Southwest to east (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 15 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 32 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Ponderosa pine/ninebark (CN190)

Typical profile

Ap and A1—0 to 10 inches; ashy silt loam

A2 and A3—10 to 18 inches; silt loam

Bw—18 to 28 inches; silt loam

E—28 to 31 inches; silt loam

Btctxb—31 to 49 inches; silty clay loam

Btcb1—49 to 54 inches; silty clay loam

Btcb2—54 to 70 inches; silt loam

Characteristics of Driscoll

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 15 to 25 percent

Depth to restrictive feature: 25 to 35 inches to abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 28 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 10 inches; silt loam

AB—10 to 17 inches; silt loam

EBtc—17 to 24 inches; silt loam
Ec—24 to 26 inches; silt loam
Btb1—26 to 42 inches; silty clay
Btb2—42 to 49 inches; silty clay
Btb3—49 to 60 inches; silty clay loam

Dissimilar Minor Components

Larkin soils

Percentage of map unit: 8 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Linear

Garfield soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Interfluves, side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Cald soils

Percentage of map unit: 2 percent
Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Linear
Across-slope shape: Concave

360—Larkin silt loam, 3 to 12 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 2,600 to 3,020 feet
Mean annual precipitation: 20 to 28 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 100 to 130 days

Map Unit Composition

Larkin and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Larkin

Setting

Landform: Hills
Geomorphic position (two-dimensional): Shoulders, summits
Geomorphic position (three-dimensional): Interfluves, side slopes
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 12 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3s

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap—0 to 6 inches; silt loam

AB—6 to 14 inches; silt loam

Bt1—14 to 22 inches; silt loam

Bt2 and Bt3—22 to 39 inches; silt loam

Btc—39 to 60 inches; silty clay loam

Dissimilar Minor Components

Southwick soils

Percentage of map unit: 8 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes, interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Driscoll soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Taney soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

361—Larkin silt loam, 12 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,560 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Larkin and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Larkin

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (representative): South

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 12 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap—0 to 6 inches; silt loam

AB—6 to 14 inches; silt loam

Bt1—14 to 22 inches; silt loam

Bt2 and Bt3—22 to 39 inches; silt loam

Btc—39 to 60 inches; silty clay loam

Dissimilar Minor Components

Southwick soils

Percentage of map unit: 8 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Driscoll soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Taney soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Garfield soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

363—Larkin-Driscoll complex, 3 to 12 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,530 to 2,920 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Larkin and similar soils: 55 percent

Driscoll and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Larkin

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 12 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap—0 to 6 inches; silt loam

AB—6 to 14 inches; silt loam

Bt1—14 to 22 inches; silt loam

Bt2 and Bt3—22 to 39 inches; silt loam

Btc—39 to 60 inches; silty clay loam

Characteristics of Driscoll

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 12 percent

Depth to restrictive feature: 25 to 35 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 28 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 10 inches; silt loam

AB—10 to 17 inches; silt loam

EBtc—17 to 24 inches; silt loam

Ec—24 to 26 inches; silt loam

Btb1—26 to 42 inches; silty clay

Btb2—42 to 49 inches; silty clay

Btb3—49 to 60 inches; silty clay loam

Dissimilar Minor Components

Southwick soils

Percentage of map unit: 8 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Garfield soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

364—Larkin-Southwick complex, 3 to 12 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,890 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Larkin and similar soils: 50 percent

Southwick and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Larkin

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 12 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap—0 to 6 inches; silt loam

AB—6 to 14 inches; silt loam

Bt1—14 to 22 inches; silt loam

Bt2 and Bt3—22 to 39 inches; silt loam

Btc—39 to 60 inches; silty clay loam

Characteristics of Southwick

Setting

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 12 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 32 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/ninebark (CN190)

Typical profile

Ap and A1—0 to 10 inches; ashy silt loam

A2 and A3—10 to 18 inches; silt loam

Bw—18 to 28 inches; silt loam

E—28 to 31 inches; silt loam

Btctxb—31 to 49 inches; silty clay loam

Btcb1—49 to 54 inches; silty clay loam

Btcb2—54 to 70 inches; silt loam

Dissimilar Minor Components

Driscoll soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Latahco soils

Percentage of map unit: 3 percent

Landform: Drainageways, low terraces

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Taney soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Little Hangman Creek

367—Larkin-Driscoll complex, 12 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,560 to 3,000 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Larkin and similar soils: 55 percent

Driscoll and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Larkin

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Linear

Aspect (representative): Southwest

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 12 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap—0 to 6 inches; silt loam

AB—6 to 14 inches; silt loam

Bt1—14 to 22 inches; silt loam

Bt2 and Bt3—22 to 39 inches; silt loam

Btc—39 to 60 inches; silty clay loam

Characteristics of Driscoll

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 12 to 25 percent

Depth to restrictive feature: 25 to 35 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 28 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 10 inches; silt loam

AB—10 to 17 inches; silt loam

EBtc—17 to 24 inches; silt loam

Ec—24 to 26 inches; silt loam

Btb1—26 to 42 inches; silty clay

Btb2—42 to 49 inches; silty clay

Btb3—49 to 60 inches; silty clay loam

Dissimilar Minor Components

Garfield soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Southwick soils

Percentage of map unit: 5 percent

Landform: North-facing hillslopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

400—Driscoll silt loam, 10 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,550 to 3,000 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Map Unit Composition

Driscoll and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Driscoll

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 10 to 25 percent

Depth to restrictive feature: 25 to 35 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 21 to 28 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 10 inches; silt loam

AB—10 to 17 inches; silt loam

EBtc—17 to 24 inches; silt loam

Ec—24 to 26 inches; silt loam
Btb1—26 to 42 inches; silty clay
Btb2—42 to 49 inches; silty clay
Btb3—49 to 60 inches; silty clay loam

Dissimilar Minor Components

Southwick soils

Percentage of map unit: 8 percent
Landform: North-facing hillslopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Concave
Across-slope shape: Linear

Larkin soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Linear

Garfield soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Interfluves, side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Cald soils

Percentage of map unit: 2 percent
Landform: Drainageways
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Linear
Across-slope shape: Concave

Garfield soils

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Interfluves, side slopes
Down-slope shape: Convex
Across-slope shape: Convex

405—Thatuna-Naff complex, 8 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 2,500 to 2,850 feet
Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Thatuna and similar soils: 45 percent

Naff and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to north (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Dissimilar Minor Components

Palouse soils

Percentage of map unit: 12 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Tilma soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

406—Thatuna-Naff complex, 25 to 40 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,850 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Thatuna and similar soils: 50 percent

Naff and similar soils: 40 percent

Dissimilar minor components: 10 percent

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 25 to 40 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 25 to 40 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Dissimilar Minor Components

Garfield soils

Percentage of map unit: 7 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Palouse soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

410—Palouse-Naff complex, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,850 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Palouse and similar soils: 50 percent

Naff and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Palouse

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 2e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 11 inches; silt loam

A—11 to 18 inches; silt loam

AB and Bw—18 to 26 inches; silt loam

Bt—26 to 60 inches; silt loam

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 2e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Dissimilar Minor Components

Thatuna soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Caldwell soils

Percentage of map unit: 3 percent

Landform: Hills, drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

Tilma soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

411—Palouse silt loam, 8 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,800 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Palouse and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Palouse

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 11 inches; silt loam

A—11 to 18 inches; silt loam

AB and Bw—18 to 26 inches; silt loam

Bt—26 to 60 inches; silt loam

Dissimilar Minor Components

Naff soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Thatuna soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Tilma soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

414—Naff-Thatuna complex, 3 to 8 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,850 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Naff and similar soils: 45 percent

Thatuna and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 2e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 8 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Dissimilar Minor Components

Palouse soils

Percentage of map unit: 8 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Tilma soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Cald soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

415—Naff-Tilma complex, 3 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,800 feet

Mean annual precipitation: 18 to 22 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 120 to 140 days

Map Unit Composition

Naff and similar soils: 50 percent

Tilma and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Characteristics of Tilma

Setting

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 3 to 20 percent

Depth to restrictive feature: 21 to 31 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 25 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 14 inches; silt loam

Bw—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

Btb1—23 to 30 inches; silty clay

Btb2—30 to 34 inches; silty clay

Btb3—34 to 42 inches; silty clay

Btb4—42 to 60 inches; silt loam

Dissimilar Minor Components

Palouse soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Thatuna soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Garfield soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Caldwell soils

Percentage of map unit: 2 percent

Landform: Hills, drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

416—Naff-Thatuna complex, 8 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,850 feet

Mean annual precipitation: 18 to 22 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 120 to 140 days

Map Unit Composition

Naff and similar soils: 45 percent

Thatuna and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Characteristics of Thatuna

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 24 to 36 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: COOL LOAMY 16-24 PZ (R009XY103WA)

Typical profile

A1—0 to 6 inches; silt loam

A2—6 to 12 inches; silt loam

AB—12 to 19 inches; silt loam

Bw—19 to 28 inches; silt loam

E—28 to 35 inches; silt loam

Btb1/E—35 to 43 inches; silty clay loam

Btb2—43 to 52 inches; silty clay loam

Btb3—52 to 60 inches; silty clay loam

Dissimilar Minor Components

Palouse soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Garfield soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Tilma soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

417—Naff-Palouse complex, 8 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,900 feet

Mean annual precipitation: 18 to 22 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 120 to 140 days

Map Unit Composition

Naff and similar soils: 45 percent

Palouse and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 8 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e
Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam
A—8 to 17 inches; silt loam
BA—17 to 26 inches; silt loam
Bt1—26 to 61 inches; silty clay loam
Bt2—61 to 80 inches; silty clay loam

Characteristics of Palouse

Setting

Landform: Hills
Geomorphic position (two-dimensional): Summits, backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): West
Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Loess
Slope range: 8 to 25 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 11.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 11 inches; silt loam
A—11 to 18 inches; silt loam
AB and Bw—18 to 26 inches; silt loam
Bt—26 to 60 inches; silt loam

Dissimilar Minor Components

Thatuna soils

Percentage of map unit: 10 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Garfield soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Tilma soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Rock outcrop

Description of areas: Small areas of nearly vertical rock cliffs, along Hangman Creek

420—Garfield-Tilma complex, 5 to 20 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,520 to 2,900 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 110 to 140 days

Map Unit Composition

Garfield and similar soils: 50 percent

Tilma and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Garfield

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 5 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 7 inches; silty clay loam

Btb1—7 to 19 inches; silty clay loam

Btb2—19 to 32 inches; silty clay

Btb3—32 to 45 inches; silty clay loam

Btb4—45 to 60 inches; silty clay loam

Characteristics of Tilma

Setting

Landform: Hills

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 5 to 10 percent

Depth to restrictive feature: 21 to 31 inches to an abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 25 inches
(see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 14 inches; silt loam

Bw—14 to 20 inches; silt loam

E—20 to 23 inches; silt loam

Btb1—23 to 30 inches; silty clay

Btb2—30 to 34 inches; silty clay

Btb3—34 to 42 inches; silty clay

Btb4—42 to 60 inches; silt loam

Dissimilar Minor Components

Naff soils

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Thatuna soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Latah soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Linear

Across-slope shape: Concave

421—Naff-Garfield complex, 5 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,500 to 2,800 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 120 to 140 days

Map Unit Composition

Naff and similar soils: 55 percent

Garfield and similar soils: 35 percent

Dissimilar minor components: 10 percent

Characteristics of Naff

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (range): All aspects

Properties and Qualities

Parent material: Loess

Slope range: 5 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 16 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap—0 to 8 inches; silt loam

A—8 to 17 inches; silt loam

BA—17 to 26 inches; silt loam

Bt1—26 to 61 inches; silty clay loam

Bt2—61 to 80 inches; silty clay loam

Characteristics of Garfield

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Loess

Slope range: 5 to 20 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 11.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Ecological site: LOAMY 16-24 PZ (R009XY102WA)

Typical profile

Ap1—0 to 5 inches; silt loam

Ap2—5 to 8 inches; silt loam

Btb1—8 to 19 inches; silty clay loam

Btb2—19 to 32 inches; silty clay

Btb3—32 to 45 inches; silty clay loam

Btb4—45 to 60 inches; silty clay loam

Dissimilar Minor Components

Thatuna soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Palouse soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Tilma soils

Percentage of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Linear

500—Hobo-Threebear complex, 5 to 30 percent slopes

Map Unit Setting

General landscape: Foothills, basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,800 to 3,500 feet
Mean annual precipitation: 30 to 35 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 80 to 110 days

Map Unit Composition

Hobo and similar soils: 50 percent
Threebear and similar soils: 35 percent
Dissimilar minor components: 15 percent

Characteristics of Hobo

Setting

Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock
Slope range: 5 to 30 percent
Depth to restrictive feature: 42 to 52 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 8 inches; ashy silt loam

Bw2—8 to 18 inches; ashy silt loam

2BEt—18 to 22 inches; silt loam

2E/Bt—22 to 30 inches; silt loam

2Bt/E—30 to 44 inches; gravelly loam

2BCt—44 to 60 inches; very gravelly loam

Characteristics of Threebear

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): East

Aspect (range): North to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 5 to 25 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 12 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; medial silt loam

Bw1—4 to 9 inches; medial silt loam

Bw2—9 to 20 inches; medial silt loam

2E/Bt—20 to 24 inches; silt loam

2Btx/E—24 to 34 inches; silt loam

2Btxb1—34 to 55 inches; silt loam

2Btxb2—55 to 60 inches; silty clay loam

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Honeyjones soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Hugus soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

501—Hobo-Threebear complex, warm, 5 to 35 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,800 to 3,400 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Hobo, warm, and similar soils: 45 percent

Threebear, warm, and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Hobo, Warm

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): Northeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 5 to 35 percent

Depth to restrictive feature: 42 to 52 inches to strongly contrasting textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 8 inches; ashy silt loam

Bw2—8 to 18 inches; ashy silt loam

2BEt—18 to 22 inches; silt loam

2E/Bt—22 to 30 inches; silt loam

2Bt/E—30 to 44 inches; gravelly loam

2BCt—44 to 60 inches; very gravelly loam

Characteristics of Threebear, Warm

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): East

Aspect (range): North to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 5 to 35 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 12 to 18 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; medial silt loam

Bw1—3 to 7 inches; medial silt loam

Bw2—7 to 18 inches; medial silt loam

2E/Bt—18 to 29 inches; silt loam

2Btx/E—29 to 36 inches; silt loam

2Btxb1—36 to 48 inches; silt loam

2Btxb2—48 to 60 inches; silty clay loam

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Hugus soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Reggear soils, moist

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

510—Honeyjones-Ahrs complex, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 4,070 feet

Mean annual precipitation: 30 to 42 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Honeyjones and similar soils: 45 percent

Ahrs and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower and upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): North to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 15 to 35 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Characteristics of Ahrs

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 15 to 35 percent

Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam

2C1—30 to 41 inches; extremely cobbly loam

2C2—41 to 51 inches; extremely cobbly silt loam

2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Pinecreek soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Honeyjones soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

600—Ardenvoir-Huckle association, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,810 to 4,200 feet

Mean annual precipitation: 27 to 35 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 50 percent
Huckle and similar soils: 35 percent
Dissimilar minor components: 15 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 25 to 35 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; gravelly ashy silt loam
Bw1—6 to 11 inches; gravelly ashy silt loam
Bw2—11 to 19 inches; gravelly loam
C1—19 to 39 inches; very cobbly loam
C2—39 to 48 inches; extremely cobbly loam
Cr—48 to 60 inches; bedrock

Characteristics of Huckle

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Concave
Across-slope shape: Linear

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and/or siltstone

Slope range: 15 to 30 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rasser soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Tigley soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

601—Ardenvoir-McCrosket association, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,850 to 4,000 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 55 percent

McCrosket and similar soils: 25 percent

Dissimilar minor components: 20 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Characteristics of McCrosket

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 12 inches; gravelly ashy silt loam

Bw—12 to 32 inches; very cobbly silt loam

BC—32 to 42 inches; extremely cobbly loam

Cr—42 to 52 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Huckle soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Cassyhill soils

Percentage of map unit: 2 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

605—Benewah-Rasser complex, 5 to 15 percent slopes

Map Unit Setting

General landscape: Foothills
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,800 to 3,280 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Benewah and similar soils: 45 percent
Rasser and similar soils: 35 percent
Dissimilar minor components: 20 percent

Characteristics of Benewah

Setting

Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium
Slope range: 5 to 15 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 9.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap—0 to 6 inches; ashy silt loam
BE—6 to 15 inches; ashy silt loam
E—15 to 18 inches; silt loam
Bt1—18 to 23 inches; silty clay loam
Bt2—23 to 34 inches; silty clay loam
Bt3—34 to 60 inches; silty clay loam

Characteristics of Rasser

Setting

Landform: Hills
Geomorphic position (two-dimensional): Footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock
Slope range: 5 to 15 percent
Depth to restrictive feature: 11 to 24 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
BA—4 to 11 inches; ashy silt loam
Bt1—11 to 20 inches; very cobbly silt loam
Bt2 and Bt3—20 to 41 inches; very gravelly silty clay loam
Bt4—41 to 60 inches; very cobbly silty clay loam

Dissimilar Minor Components

Santa soils

Percentage of map unit: 12 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Convex

Grangemont soils, warm

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Reggear soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Lovell soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

606—Benewah-Rasser complex, 15 to 35 percent slopes

Map Unit Setting

General landscape: Foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,800 to 3,300 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Benewah and similar soils: 45 percent

Rasser and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Benewah

Setting

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium

Slope range: 15 to 35 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 15 to 20 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Ap—0 to 6 inches; ashy silt loam

BE—6 to 15 inches; ashy silt loam

E—15 to 18 inches; silt loam

Bt1—18 to 23 inches; silty clay loam

Bt2—23 to 34 inches; silty clay loam

Bt3—34 to 60 inches; silty clay loam

Characteristics of Rasser

Setting

Landform: Hills

Geomorphic position (two-dimensional): Footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex, linear

Across-slope shape: Linear, concave

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 11 to 24 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

BA—4 to 11 inches; ashy silt loam
Bt1—11 to 20 inches; very cobbly silt loam
Bt2 and Bt3—20 to 41 inches; very gravelly silty clay loam
Bt4—41 to 60 inches; very cobbly silty clay loam

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 7 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Arson soils

Percentage of map unit: 5 percent

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Huckle soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex, concave

610—Schumacher silt loam, 5 to 25 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,550 to 3,300 feet

Mean annual precipitation: 20 to 24 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 120 to 135 days

Map Unit Composition

Schumacher and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Schumacher

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex, concave

Aspect (representative): West

Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from metasedimentary rock

Slope range: 5 to 25 percent

Depth to restrictive feature: 40 to 60 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3e

Ecological site: LOAMY 16-22 FEID-PSSPS (R009XY003ID)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 8 inches; silt loam

BA—8 to 20 inches; silt loam

Bt1—20 to 27 inches; silt loam

Bt2—27 to 34 inches; gravelly silt loam

Bt3—34 to 41 inches; very cobbly clay loam

Bt4—41 to 47 inches; gravelly clay loam

R—47 to 57 inches; bedrock

Dissimilar Minor Components

Tekoa soils

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Libertybutte soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Larkin soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, summits

Geomorphic position (three-dimensional): Interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Convex

611—Schumacher-Tekoa complex, 25 to 45 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,600 to 3,500 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Schumacher and similar soils: 45 percent

Tekoa and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Schumacher

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex, linear

Across-slope shape: Convex, concave

Aspect (representative): West

Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from metasedimentary rock

Slope range: 25 to 40 percent

Depth to restrictive feature: 40 to 60 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: LOAMY 16-22 FEID-PSSPS (R009XY003ID)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 8 inches; silt loam

BA—8 to 20 inches; silt loam

Bt1—20 to 27 inches; silt loam

Bt2—27 to 34 inches; gravelly silt loam

Bt3—34 to 41 inches; very cobbly clay loam

Bt4—41 to 47 inches; gravelly clay loam

R—47 to 57 inches; bedrock

Characteristics of Tekoa

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 25 to 45 percent

Depth to restrictive feature: 29 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)

Typical profile

A1—0 to 7 inches; gravelly ashy silt loam

A2—7 to 13 inches; very cobbly silt loam

BA—13 to 17 inches; very cobbly silt loam

Bt1—17 to 27 inches; very cobbly silty clay loam

Bt2—27 to 33 inches; very gravelly silty clay loam

R—33 to 43 inches; bedrock

Dissimilar Minor Components

Libertybutte soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Cassyhill soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Arson soils, dry

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

612—Libertybutte-Tekoa complex, 5 to 30 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies

Elevation: 2,850 to 3,700 feet

Mean annual precipitation: 20 to 25 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Libertybutte and similar soils: 45 percent

Tekoa and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Libertybutte

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Loess over colluvium derived from metasedimentary rock

Slope range: 5 to 30 percent

Depth to restrictive feature: 14 to 19 inches to paralithic rock; 14 to 20 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 2.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: SHALLOW SOUTH SLOPE STONY 16-22 PSSPS-POSE
(R009XY026ID)

Typical profile

A—0 to 4 inches; gravelly silt loam

Bt1—4 to 11 inches; gravelly silt loam

Bt2—11 to 16 inches; very gravelly silt loam

Crt—16 to 19 inches; bedrock

R—19 to 29 inches; bedrock

Characteristics of Tekoa

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 10 to 30 percent

Depth to restrictive feature: 29 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Ecological site: SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)

Typical profile

A1—0 to 7 inches; gravelly ashy silt loam

A2—7 to 13 inches; very cobbly silt loam

BA—13 to 17 inches; very cobbly silt loam

Bt1—17 to 27 inches; very cobbly silty clay loam

Bt2—27 to 33 inches; very gravelly silty clay loam

R—33 to 43 inches; bedrock

Dissimilar Minor Components

Schumacher soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex, linear
Across-slope shape: Convex, concave

McCrosket soils

Percentage of map unit: 3 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Cassyhill soils

Percentage of map unit: 2 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

613—Ardenvoir, dry-Lotuspoint complex, 5 to 30 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,250 to 3,850 feet
Mean annual precipitation: 28 to 35 inches
Mean annual air temperature: 42 to 49 degrees F
Frost-free period: 90 to 140 days

Map Unit Composition

Ardenvoir, dry, and similar soils: 50 percent
Lotuspoint and similar soils: 35 percent
Dissimilar minor components: 15 percent

Characteristics of Ardenvoir, Dry

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 5 to 30 percent
Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; gravelly ashy silt loam

AB—3 to 11 inches; gravelly ashy silt loam

Bw—11 to 18 inches; very gravelly loam

C1—18 to 32 inches; extremely gravelly loam

C2—32 to 41 inches; extremely cobbly loam

C3—41 to 60 inches; extremely stony loam

Cr—60 to 70 inches; bedrock

Characteristics of Lotuspoint

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite

Slope range: 5 to 30 percent

Depth to restrictive feature: 20 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Arson soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Cassyll soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

614—Ardenvoir, dry-Lotuspoint complex, 30 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,250 to 3,940 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 49 degrees F

Frost-free period: 90 to 140 days

Map Unit Composition

Ardenvoir, dry, and similar soils: 50 percent

Lotuspoint and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Ardenvoir, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 30 to 65 percent

Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; gravelly ashy silt loam
AB—3 to 11 inches; gravelly ashy silt loam
Bw—11 to 18 inches; very gravelly loam
C1—18 to 32 inches; extremely gravelly loam
C2—32 to 41 inches; extremely cobbly loam
C3—41 to 60 inches; extremely stony loam
Cr—60 to 70 inches; bedrock

Characteristics of Lotuspoint

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite
Slope range: 30 to 65 percent
Depth to restrictive feature: 20 to 40 inches to lithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; gravelly ashy silt loam

AB—4 to 10 inches; stony ashy silt loam
2Bw1—10 to 16 inches; extremely stony silt loam
2Bw2—16 to 26 inches; extremely stony loam
2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Cassyhill soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Pinecreek soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

617—Tekoa gravelly ashy silt loam, 15 to 40 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 9—Palouse and Nez Perce Prairies
Elevation: 3,050 to 3,450 feet
Mean annual precipitation: 20 to 28 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 140 days

Map Unit Composition

Tekoa and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Tekoa

Setting

Landform: Mountain slopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 15 to 40 percent
Depth to restrictive feature: 29 to 40 inches to lithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 3.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Ecological site: SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)

Typical profile

A1—0 to 7 inches; gravelly ashy silt loam
A2—7 to 13 inches; very cobbly silt loam
BA—13 to 17 inches; very cobbly silt loam
Bt1—17 to 27 inches; very cobbly silty clay loam
Bt2—27 to 33 inches; very gravelly silty clay loam
R—33 to 43 inches; bedrock

Dissimilar Minor Components

Schumacher soils

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex, linear
Across-slope shape: Convex, concave

Libertybutte soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Summits, shoulders, backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Cassyhill soils

Percentage of map unit: 3 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Arson soils, dry

Percentage of map unit: 2 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes
Down-slope shape: Linear
Across-slope shape: Concave

621—Huckle ashy silt loam, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 4,610 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 100 days

Map Unit Composition

Huckle and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountaintops, mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and/or siltstone

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Tigley soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Linear

625—Huckle-Ardenvoir association, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,920 to 4,250 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Huckle and similar soils: 45 percent

Ardenvoir and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountaintops, mountainflanks

Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and/or siltstone
Slope range: 15 to 35 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 4 inches; ashy silt loam
Bw1—4 to 8 inches; ashy silt loam
Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam
2Bw4—19 to 28 inches; very cobbly silt loam
2BC—28 to 38 inches; extremely cobbly silt loam
2C—38 to 47 inches; extremely cobbly loam
2Cr—47 to 57 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 25 to 35 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Grangemont soils, warm

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

650—Grangemont ashy silt loam, 5 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Soil Survey of Benewah County Area, Idaho, Western Part

Elevation: 2,750 to 3,400 feet

Mean annual precipitation: 28 to 33 inches

Mean annual air temperature: 41 to 43 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Grangemont and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Grangemont

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 5 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very high (about 12.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

Bw—4 to 10 inches; ashy silt loam

2E/Bt1—10 to 18 inches; silt loam

2E/Bt2—18 to 25 inches; silt loam

2Btx/E1—25 to 34 inches; silt loam

2Btx/E2—34 to 42 inches; silt loam

2Btx/E3—42 to 53 inches; silt loam

2Btxb—53 to 63 inches; cobbly silty clay loam

Dissimilar Minor Components

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Reggear soils, moist

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Threebear soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Sly soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Kingspeak soils, cool

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

651—Kingspeak-Shayhill, stony complex, 5 to 40 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,200 to 2,950 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Kingspeak and similar soils: 55 percent

Shayhill, stony surface, and similar soils: 30 percent

Dissimilar minor components: 15 percent

Characteristics of Kingspeak

Setting

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Soil Survey of Benewah County Area, Idaho, Western Part

Aspect (representative): Northwest

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or lacustrine deposits

Slope range: 5 to 30 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw—3 to 10 inches; ashy silt loam

E/Bt—10 to 30 inches; silt loam

Bt/E—30 to 60 inches; silt loam

Characteristics of Shayhill, Stony Surface

Setting

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 15 to 40 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 19 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 10 inches; ashy silt loam

Bw2—10 to 19 inches; cobbly silt loam

Bw3—19 to 28 inches; very stony silt loam

Bt—28 to 48 inches; extremely cobbly loam over very cobbly loam

BCt—48 to 55 inches; extremely stony loam

C—55 to 64 inches; extremely cobbly loam

Dissimilar Minor Components

Agatha soils, cobbly surface

Percentage of map unit: 5 percent

Landform: Structural benches, escarpments

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Convex

Across-slope shape: Convex

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Kingspeak soils, cool

Percentage of map unit: 3 percent

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Dorb soils, warm

Percentage of map unit: 2 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

652—Kingspeak ashy silt loam, 3 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,130 to 2,950 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Kingspeak and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Kingspeak

Setting

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): East

Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or lacustrine deposits

Slope range: 3 to 25 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw—3 to 10 inches; ashy silt loam

E/Bt—10 to 30 inches; silt loam

Bt/E—30 to 60 inches; silt loam

Dissimilar Minor Components

Dorb soils, warm

Percentage of map unit: 5 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Shayhill soils

Percentage of map unit: 5 percent
Landform: Escarpments, structural benches
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Reggear soils, moist

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Linear

Kingspeak soils, cool

Percentage of map unit: 2 percent
Landform: Structural benches, hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

653—Kingspeak ashy silt loam, cool, 5 to 30 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,130 to 3,050 feet
Mean annual precipitation: 28 to 31 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Kingspeak, cool, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Kingspeak, Cool

Setting

Landform: Structural benches, hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Linear, concave
Aspect (representative): Northeast
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or lacustrine deposits
Slope range: 5 to 30 percent
Depth to restrictive feature: None within a depth of 60 inches

Soil Survey of Benewah County Area, Idaho, Western Part

Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; ashy silt loam
Bw—3 to 10 inches; ashy silt loam
E/Bt—10 to 30 inches; silt loam
Bt/E—30 to 60 inches; silt loam

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Kingspeak soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Linear

Shayhill soils

Percentage of map unit: 5 percent
Landform: Escarpments, structural benches
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Agatha soils

Percentage of map unit: 3 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Convex
Across-slope shape: Convex

Reggear soils, moist

Percentage of map unit: 2 percent
Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

655—Tigley gravelly ashy silt loam, moist, 15 to 35 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,850 to 3,400 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 115 days

Map Unit Composition

Tigley, moist, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Tigley, Moist

Setting

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Center third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

Bw—4 to 9 inches; gravelly ashy silt loam

Bt1 and Bt2—9 to 34 inches; gravelly silt loam over very gravelly silt loam

Bt3 and Bt4—34 to 60 inches; very gravelly loam

Dissimilar Minor Components

Bechtel soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear, convex

Across-slope shape: Convex

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Hugus soils, warm

Percentage of map unit: 5 percent

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Rasser soils

Percentage of map unit: 3 percent

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

656—Kingspeak ashy silt loam, dry, 5 to 30 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,130 to 2,550 feet

Mean annual precipitation: 28 to 31 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 115 days

Map Unit Composition

Kingspeak, dry, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Kingspeak, Dry

Setting

Landform: Structural benches, hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or lacustrine deposits

Slope range: 5 to 30 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw—3 to 10 inches; ashy silt loam

E/Bt—10 to 30 inches; silt loam

Bt/E—30 to 60 inches; silt loam

Dissimilar Minor Components

Shayhill soils, dry

Percentage of map unit: 10 percent

Landform: Canyons, escarpments

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Sharptop soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Seddow soils

Percentage of map unit: 3 percent

Landform: Structural benches, canyons

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear
Across-slope shape: Concave

Blinn soils

Percentage of map unit: 2 percent
Landform: Structural benches, escarpments
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

660—Threebear medial silt loam, 3 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,800 to 3,300 feet
Mean annual precipitation: 30 to 33 inches
Mean annual air temperature: 41 to 43 degrees F
Frost-free period: 80 to 100 days

Map Unit Composition

Threebear and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Threebear

Setting

Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 3 to 25 percent
Depth to restrictive feature: 23 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 12 to 20 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 9.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s
Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; medial silt loam
Bw1—4 to 9 inches; medial silt loam
Bw2—9 to 20 inches; medial silt loam
2E/Bt—20 to 24 inches; silt loam
2Btx/E—24 to 34 inches; silt loam
2Btxb1—34 to 55 inches; silt loam
2Btxb2—55 to 60 inches; silty clay loam

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Reggear soils, moist

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Hugus soils

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Porrett soils

Percentage of map unit: 2 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

662—Threebear medial silt loam, warm, 3 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 3,400 feet

Mean annual precipitation: 30 to 33 inches
Mean annual air temperature: 41 to 44 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Threebear, warm, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Threebear, Warm

Setting

Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): East
Aspect (range): North to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 3 to 25 percent
Depth to restrictive feature: 23 to 40 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 12 to 18 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 9.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; medial silt loam
Bw1—3 to 7 inches; medial silt loam
Bw2—7 to 18 inches; medial silt loam
2E/Bt—18 to 29 inches; silt loam
2Btx/E—29 to 36 inches; silt loam
2Btxb1—36 to 48 inches; silt loam
2Btxb2—48 to 60 inches; silty clay loam

Dissimilar Minor Components

Grangemont soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes, interfluves
Down-slope shape: Linear
Across-slope shape: Linear, concave

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Reggear soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

663—Threebear, warm-Porrett complex, 0 to 4 percent slopes

Map Unit Setting

General landscape: Basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,800 to 3,260 feet

Mean annual precipitation: 28 to 33 inches

Mean annual air temperature: 41 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Threebear, warm, and similar soils: 50 percent

Porrett and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Threebear, Warm

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 3 to 4 percent

Depth to restrictive feature: 23 to 40 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 12 to 18 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.1 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4s

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; medial silt loam

Bw1—3 to 7 inches; medial silt loam

Bw2—7 to 18 inches; medial silt loam

2E/Bt—18 to 29 inches; silt loam

2Btx/E—29 to 36 inches; silt loam

2Btxb1—36 to 48 inches; silt loam

2Btxb2—48 to 60 inches; silty clay loam

Characteristics of Porrett

Setting

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 0 to 2 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: Frequent (see Water Features table)

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at the soil surface to a depth of about 4 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w

Ecological site: MEADOW (R009XY018ID)

Typical profile

Ap—0 to 3 inches; ashy silt loam

E1 and E2—3 to 14 inches; ashy silt loam

E3 and E4—14 to 21 inches; silt loam

Bt—21 to 60 inches; silty clay loam

Dissimilar Minor Components

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Reggear soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Grangemont soils, warm

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Grangemont soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes, interfluves

Down-slope shape: Linear

Across-slope shape: Linear, concave

665—Grangemont ashy silt loam, warm, 5 to 25 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,150 feet

Mean annual precipitation: 28 to 33 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Grangemont, warm, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Grangemont, Warm

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Concave
Aspect (representative): North
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 5 to 25 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Very high (about 12.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
Bw—4 to 10 inches; ashy silt loam
2E/Bt1—10 to 18 inches; silt loam
2E/Bt2—18 to 25 inches; silt loam
2Btx/E1—25 to 34 inches; silt loam
2Btx/E2—34 to 42 inches; silt loam
2Btx/E3—42 to 53 inches; silt loam
2Btxb—53 to 63 inches; cobbly silty clay loam

Dissimilar Minor Components

Benewah soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulders, backslopes, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Kingspeak soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, shoulders, footslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Reggear soils, moist

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, footslopes
Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Sly soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

670—Honeyjones ashy silt loam, warm, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,000 to 4,600 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Honeyjones, warm, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones, Warm

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountaintops, upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 15 to 35 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; ashy silt loam
Bw1—3 to 7 inches; ashy silt loam
Bw2—7 to 19 inches; ashy silt loam
2Bw3—19 to 24 inches; very gravelly silt loam
2C1—24 to 35 inches; extremely gravelly loam
2C2—35 to 47 inches; extremely cobbly loam
2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Ahrs soils, moist

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Ahrs soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Huckle soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Hugus soils, warm

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes
Down-slope shape: Concave
Across-slope shape: Linear

671—Honeyjones ashy silt loam, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,900 to 4,200 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 80 to 100 days

Map Unit Composition

Honeyjones and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountaintops, upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): North to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 15 to 35 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

680—Ardenvoir-Huckle complex, 5 to 20 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,000 to 4,710 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 45 percent

Huckle and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): West

Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 5 to 20 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Mountaintops, upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 5 to 20 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Honeyjones soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Lotuspoint soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

681—Huckle-Ahrs complex, 5 to 20 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,200 to 4,800 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Huckle and similar soils: 45 percent

Ahrs and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders

Geomorphic position (three-dimensional): Mountaintops, upper third of mountainflanks

Down-slope shape: Linear

Soil Survey of Benewah County Area, Idaho, Western Part

Across-slope shape: Convex
Aspect (representative): North
Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone
Slope range: 5 to 20 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 4 inches; ashy silt loam
Bw1—4 to 8 inches; ashy silt loam
Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam
2Bw4—19 to 28 inches; very cobbly silt loam
2BC—28 to 38 inches; extremely cobbly silt loam
2C—38 to 47 inches; extremely cobbly loam
2Cr—47 to 57 inches; bedrock

Characteristics of Ahrs

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Shoulders
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): East
Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite
Slope range: 5 to 20 percent
Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam

2C1—30 to 41 inches; extremely cobbly loam

2C2—41 to 51 inches; extremely cobbly silt loam

2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

700—Ardenvoir-Huckle association, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,810 to 4,000 feet

Mean annual precipitation: 27 to 35 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 50 percent
Huckle and similar soils: 35 percent
Dissimilar minor components: 15 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; gravelly ashy silt loam
Bw1—6 to 11 inches; gravelly ashy silt loam
Bw2—11 to 19 inches; gravelly loam
C1—19 to 39 inches; very cobbly loam
C2—39 to 48 inches; extremely cobbly loam
Cr—48 to 58 inches; bedrock

Characteristics of Huckle

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Concave
Across-slope shape: Linear

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Huckle soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Tigley soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

701—Ardenvoir-McCrosket association, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 4,000 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 55 percent

McCrosket and similar soils: 25 percent

Dissimilar minor components: 20 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam
C2—39 to 48 inches; extremely cobbly loam
Cr—48 to 58 inches; bedrock

Characteristics of McCrosket

Setting

Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 12 inches; gravelly ashy silt loam
Bw—12 to 32 inches; very cobbly silt loam
BC—32 to 42 inches; extremely cobbly loam
Cr—42 to 52 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils

Percentage of map unit: 7 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Ardenvoir soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Huckle soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Cassyhill soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

703—Ardenvoir, dry-Ardenvoir complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,750 to 3,550 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir, dry, and similar soils: 45 percent

Ardenvoir and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Ardenvoir, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; gravelly ashy silt loam

AB—3 to 11 inches; gravelly ashy silt loam

Bw—11 to 18 inches; very gravelly loam

C1—18 to 32 inches; extremely gravelly loam

C2—32 to 41 inches; extremely cobbly loam

C3—41 to 60 inches; extremely stony loam

Cr—60 to 70 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Southeast

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 60 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Huckle soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Cassyhill soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

704—Ardenvoir, dry-Ardenvoir complex, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,780 to 3,990 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir, dry, and similar soils: 45 percent

Ardenvoir and similar soils: 40 percent

Dissimilar minor components: 15 percent

Characteristics of Ardenvoir, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Soil Survey of Benewah County Area, Idaho, Western Part

Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 15 to 35 percent
Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; gravelly ashy silt loam
AB—3 to 11 inches; gravelly ashy silt loam
Bw—11 to 18 inches; very gravelly loam
C1—18 to 32 inches; extremely gravelly loam
C2—32 to 41 inches; extremely cobbly loam
C3—41 to 60 inches; extremely stony loam
Cr—60 to 70 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Shoulders, backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 15 to 35 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 60 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Arson soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Cassyhill soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

705—Ardenvoir-Rasser complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,640 to 3,700 feet

Soil Survey of Benewah County Area, Idaho, Western Part

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 50 percent

Rasser and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Characteristics of Rasser

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear, concave

Across-slope shape: Linear
Aspect (representative): Southwest
Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or colluvium derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 11 to 24 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; ashy silt loam
BA—4 to 11 inches; ashy silt loam
Bt1—11 to 20 inches; very cobbly silt loam
Bt2 and Bt3—20 to 41 inches; very gravelly silty clay loam
Bt4—41 to 60 inches; very cobbly silty clay loam

Dissimilar Minor Components

Arson soils

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks, side slopes
Down-slope shape: Linear
Across-slope shape: Convex

Ardenvoir soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Huckle soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

706—Ardenvoir gravelly ashy silt loam, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 4,200 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Concave

Across-slope shape: Linear

McCrosket soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Saint Maries soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Center third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

707—Huckle, dry-Ardenvoir complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,810 to 4,300 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Huckle, dry, and similar soils: 50 percent

Ardenvoir and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Huckle, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Concave

Across-slope shape: Linear
Aspect (representative): North
Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 4 inches; ashy silt loam
Bw1—4 to 8 inches; ashy silt loam
Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam
2Bw4—19 to 28 inches; very cobbly silt loam
2BC—28 to 38 inches; extremely cobbly silt loam
2C—38 to 47 inches; extremely cobbly loam
2Cr—47 to 57 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Saint Maries soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Center third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rasser soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Honeyjones soils, warm

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

710—McCrosket-Ardenvoir association, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,730 to 3,610 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

McCrosket and similar soils: 50 percent

Ardenvoir and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of McCrosket

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 12 inches; gravelly ashy silt loam

Bw—12 to 32 inches; very cobbly silt loam

BC—32 to 42 inches; extremely cobbly loam

Cr—42 to 52 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Convex, linear

Across-slope shape: Linear, concave

Aspect (representative): Southeast

Aspect (range): East to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 15 to 35 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 10 percent

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Convex, linear

Across-slope shape: Linear, concave

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Arson soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Tekoa soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

711—McCrosket-Ardenvoir association, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,730 to 3,740 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

McCrosket and similar soils: 50 percent

Ardenvoir and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of McCrosket

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 12 inches; gravelly ashy silt loam

Bw—12 to 32 inches; very cobbly silt loam

BC—32 to 42 inches; extremely cobbly loam

Cr—42 to 52 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Convex, linear

Across-slope shape: Linear, concave

Aspect (representative): Southeast

Aspect (range): East to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Arson soils

Percentage of map unit: 7 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Huckle soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Tekoa soils

Percentage of map unit: 2 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

712—McCrosket-Tekoa association, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,600 to 3,610 feet
Mean annual precipitation: 20 to 35 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 90 to 140 days

Map Unit Composition

McCrosket and similar soils: 50 percent
Tekoa and similar soils: 30 percent
Dissimilar minor components: 20 percent

Characteristics of McCrosket

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks, side slopes
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): Northwest
Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 12 inches; gravelly ashy silt loam
Bw—12 to 32 inches; very cobbly silt loam
BC—32 to 42 inches; extremely cobbly loam
Cr—42 to 52 inches; bedrock

Characteristics of Tekoa

Setting

Landform: Mountain slopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southwest
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 29 to 40 inches to lithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 3.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Ecological site: SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)

Typical profile

A1—0 to 7 inches; gravelly ashy silt loam
A2—7 to 13 inches; very cobbly silt loam
BA—13 to 17 inches; very cobbly silt loam
Bt1—17 to 27 inches; very cobbly silty clay loam
Bt2—27 to 33 inches; very gravelly silty clay loam
R—33 to 43 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks, side slopes
Down-slope shape: Linear
Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Cassyhill soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear, concave

Across-slope shape: Linear

716—Ah_{rs} gravelly ashy silt loam, 15 to 35 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,820 to 3,810 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Ah_{rs} and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Ah_{rs}

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 15 to 35 percent

Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (K_{sat}): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam

2C1—30 to 41 inches; extremely cobbly loam

2C2—41 to 51 inches; extremely cobbly silt loam

2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Honeyjones soils, dry

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Pinecreek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Saint Maries soils, dry

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Tigley soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

720—Huckle ashy silt loam, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 3,100 to 4,700 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Huckle and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Huckle

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone
Slope range: 35 to 65 percent
Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 4 inches; ashy silt loam
Bw1—4 to 8 inches; ashy silt loam
Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam
2BC—28 to 38 inches; extremely cobbly silt loam
2C—38 to 47 inches; extremely cobbly loam
2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Hugus soils, warm

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Saint Maries soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Tigley soils, moist

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

721—Huckle-Ardenvoir association, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 3,260 to 4,260 feet
Mean annual precipitation: 28 to 35 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Huckle and similar soils: 50 percent
Ardenvoir and similar soils: 35 percent
Dissimilar minor components: 15 percent

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; gravelly ashy silt loam
Bw1—6 to 11 inches; gravelly ashy silt loam
Bw2—11 to 19 inches; gravelly loam
C1—19 to 39 inches; very cobbly loam
C2—39 to 48 inches; extremely cobbly loam
Cr—48 to 58 inches; bedrock

Dissimilar Minor Components

Saint Maries soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Ahrs soils

Percentage of map unit: 4 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Bechtel soils

Percentage of map unit: 3 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes
Down-slope shape: Linear, convex
Across-slope shape: Convex

Rasser soils

Percentage of map unit: 3 percent
Landform: Hills, mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

735—Lotuspoint stony ashy silt loam, 35 to 65 percent slopes, stony

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,080 to 4,200 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Lotuspoint, stony surface, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Lotuspoint, Stony Surface

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite

Slope range: 35 to 65 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; stony ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Cassyhill soils

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Pinecreek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Ardenvoir soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 2 percent

736—Lotuspoint, stony-Rock outcrop complex, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,800 to 4,610 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Lotuspoint, stony surface, and similar soils: 65 percent

Rock outcrop: 15 percent

Dissimilar minor components: 20 percent

Characteristics of Lotuspoint, Stony Surface

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite

Slope range: 35 to 75 percent

Surface area covered with stones: 0.01 to 0.1 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; stony ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Characteristics of Rock Outcrop

Description of areas: Exposures of bare bedrock

Land capability subclass: 8

Dissimilar Minor Components

Cassyhill soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Pinecreek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Ahrs soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Ardenvoir soils

Percentage of map unit: 2 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

756—Tigley gravelly ashy silt loam, 35 to 65 percent slopes

Map Unit Setting

General landscape: Foothills, mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 2,850 to 4,200 feet
Mean annual precipitation: 30 to 35 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Tigley and similar soils: 80 percent
Dissimilar minor components: 20 percent

Characteristics of Tigley

Setting

Landform: Hills, mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Center third of mountainflanks, side slopes
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): Northwest
Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): High (about 9.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

Bw—4 to 9 inches; gravelly ashy silt loam

Bt1 and Bt2—9 to 34 inches; gravelly silt loam over very gravelly silt loam

Bt3 and Bt4—34 to 60 inches; very gravelly loam

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Bechtel soils

Percentage of map unit: 5 percent

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear, convex

Across-slope shape: Convex

Hugus soils, warm

Percentage of map unit: 5 percent

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Ahrs soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Saint Maries soils, dry

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

757—Hugus ashy silt loam, warm, 30 to 65 percent slopes

Map Unit Setting

General landscape: Mountains, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,830 to 3,600 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Hugus, warm, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Hugus, Warm

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Northeast

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 30 to 65 percent

Depth to restrictive feature: 30 to 40 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

Bw1—4 to 9 inches; ashy silt loam

Bw2—9 to 20 inches; ashy silt loam

2Bt1—20 to 39 inches; very gravelly silt loam

2Bt2—39 to 55 inches; extremely gravelly silt loam

2BtC—55 to 63 inches; extremely gravelly loam

Dissimilar Minor Components

Tigley soils

Percentage of map unit: 7 percent

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Hobo soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones soils, warm

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

758—Tigley, moist-Hugus complex, 30 to 65 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,850 to 3,900 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 120 days

Map Unit Composition

Tigley, moist, and similar soils: 50 percent

Hugus and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Tigley, Moist

Setting

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Center third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Northwest

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Soil Survey of Benewah County Area, Idaho, Western Part

Slope range: 30 to 65 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

Bw—4 to 9 inches; gravelly ashy silt loam

Bt1 and Bt2—9 to 34 inches; gravelly silt loam over very gravelly silt loam

Bt3 and Bt4—34 to 60 inches; very gravelly loam

Characteristics of Hugus

Setting

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 30 to 65 percent

Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; ashy silt loam

Bw1—4 to 9 inches; ashy silt loam
Bw2—9 to 20 inches; ashy silt loam
2Bt1 and 2Bt2—20 to 31 inches; very gravelly silt loam
2Bt3 and 2Bt4—31 to 47 inches; extremely gravelly silt loam
2Bt5—47 to 60 inches; extremely gravelly loam

Dissimilar Minor Components

Bechtel soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear, convex

Across-slope shape: Convex

Saint Maries soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Ardenvoir soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Honeyjones soils, warm

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

765—Saint Maries-Huckle complex, 35 to 70 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,200 to 3,400 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Saint Maries and similar soils: 45 percent

Huckle and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Saint Maries

Setting

Landform: Escarpments, mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from siltstone and quartzite

Slope range: 45 to 70 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 4.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 8e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; very gravelly ashy silt loam

Bw1—4 to 9 inches; very gravelly ashy silt loam

Bw2—9 to 22 inches; very gravelly ashy loam

BC—22 to 28 inches; extremely gravelly loam

C1—28 to 38 inches; extremely flaggy loam

C2—38 to 47 inches; extremely cobbly loam

C3—47 to 60 inches; extremely cobbly loam

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 35 to 60 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Dorb soils, warm

Percentage of map unit: 5 percent

Landform: Escarpments

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones soils, warm

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Ardenvoir soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

770—Pinecreek gravelly ashy silt loam, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,500 to 4,500 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 44 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Pinecreek and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Pinecreek

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A1—2 to 6 inches; gravelly ashy silt loam

A2—6 to 12 inches; gravelly ashy silt loam

Bw1—12 to 19 inches; gravelly ashy silt loam

Bw2—19 to 24 inches; gravelly ashy silt loam

2Bw3—24 to 30 inches; very gravelly loam

2C—30 to 70 inches; extremely flaggy loam over extremely cobbly loam over extremely gravelly loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rasser soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Cassyhill soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

771—Honeyjones ashy silt loam, warm, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,950 to 3,800 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Honeyjones, warm, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones, Warm

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear
Aspect (representative): North
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite
Slope range: 35 to 65 percent
Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Western redcedar/queencup beadleily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 3 inches; ashy silt loam
Bw1—3 to 7 inches; ashy silt loam
Bw2—7 to 19 inches; ashy silt loam
2Bw3—19 to 24 inches; very gravelly silt loam
2C1—24 to 35 inches; extremely gravelly loam
2C2—35 to 47 inches; extremely cobbly loam
2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Honeyjones soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Lower third of mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Huckle soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils, warm

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Linear

Across-slope shape: Convex

Ahrs soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

772—Honeyjones, warm-Ahrs complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,000 to 4,600 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Honeyjones, warm, and similar soils: 45 percent

Ahrs and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones, Warm

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Characteristics of Ahrs

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): Southeast to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam

2C1—30 to 41 inches; extremely cobbly loam

2C2—41 to 51 inches; extremely cobbly silt loam

2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Honeyjones soils, dry

Percentage of map unit: 7 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils, warm

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Saint Maries soils, dry

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

773—Honeyjones ashy silt loam, dry, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,500 to 4,000 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Honeyjones, dry, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Pinecreek soils, moist

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

774—Pinecreek ashy silt loam, moist, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,400 to 4,200 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 44 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Pinecreek, moist, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Pinecreek, Moist

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Northeast

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification

Soil Survey of Benewah County Area, Idaho, Western Part

Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A1—2 to 6 inches; ashy silt loam
A2—6 to 12 inches; ashy silt loam
Bw1—12 to 19 inches; gravelly ashy silt loam
Bw2—19 to 24 inches; gravelly ashy silt loam
2Bw3—24 to 30 inches; very gravelly loam
2C—30 to 70 inches; extremely flaggy loam over extremely cobbly loam over extremely gravelly loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Honeyjones soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Linear

Huckle soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Honeyjones soils, warm

Percentage of map unit: 3 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Rasser soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

775—Pinecreek gravelly ashy silt loam, moist, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 4,300 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 44 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Pinecreek, moist, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Pinecreek, Moist

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A1—2 to 6 inches; gravelly ashy silt loam
A2—6 to 12 inches; gravelly ashy silt loam
Bw1—12 to 19 inches; gravelly ashy silt loam
Bw2—19 to 24 inches; gravelly ashy silt loam
2Bw3—24 to 30 inches; very gravelly loam
2C—30 to 70 inches; extremely flaggy loam over extremely cobbly loam over
extremely gravelly loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 8 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Rasser soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave, linear

Across-slope shape: Linear, concave

Honeyjones soils, warm

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 2 percent

**776—Cassyhill very gravelly ashy silt loam, 35 to 65
percent slopes**

Map Unit Setting

General landscape: Mountains ([fig. 7](#))

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,190 to 3,800 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 100 to 140 days



Figure 7.—Ponderosa pine/common snowberry habitat type in an area of Cassyhill very gravelly ashy silt loam, 35 to 65 percent slopes, on a mountain slope. Hepton Lake is in background.

Map Unit Composition

Cassyhill and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Cassyhill

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 10 to 20 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 1.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A1—1 to 7 inches; very gravelly ashy silt loam

A2—7 to 11 inches; very gravelly ashy loam

C—11 to 14 inches; extremely channery loam

R—14 to 24 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils, stony surface

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 5 percent

777—Bouldercreek ashy silt loam, warm, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,000 to 4,100 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Bouldercreek, warm, and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Bouldercreek, Warm

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex
Aspect (representative): North
Aspect (range): North to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite
Slope range: 35 to 65 percent
Depth to restrictive feature: 16 to 25 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 3 inches; moderately decomposed plant material
A—3 to 4 inches; ashy silt loam
Bw1—4 to 8 inches; ashy silt loam
Bw2—8 to 17 inches; ashy silt loam
2Bw3—17 to 25 inches; very gravelly loam
2Bw4—25 to 33 inches; very gravelly loam
2Bw5—33 to 40 inches; very gravelly sandy loam
2C1—40 to 55 inches; very gravelly loamy sand
2C2—55 to 60 inches; very cobbly loamy sand

Dissimilar Minor Components

Honeyjones soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Huckle soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Ardenvoir soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Ahrs soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

778—Cassyhill-Lotuspoint complex, 5 to 30 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,190 to 4,840 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 100 to 140 days

Map Unit Composition

Cassyhill and similar soils: 50 percent

Lotuspoint and similar soils: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Cassyhill

Setting

Landform: Mountain slopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 5 to 30 percent

Depth to restrictive feature: 10 to 20 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Very low (about 1.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6s

Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A1—1 to 7 inches; very gravelly ashy silt loam

A2—7 to 11 inches; very gravelly ashy loam

C—11 to 14 inches; extremely channery loam

R—14 to 24 inches; bedrock

Characteristics of Lotuspoint

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite

Slope range: 5 to 30 percent

Depth to restrictive feature: 20 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Concave

Across-slope shape: Linear

Pinecreek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Rock outcrop

Percentage of map unit: 5 percent

779—Bouldercreek ashy silt loam, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,200 to 4,650 feet

Mean annual precipitation: 35 to 40 inches

Mean annual air temperature: 41 to 43 degrees F

Frost-free period: 70 to 90 days

Map Unit Composition

Bouldercreek and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Bouldercreek

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 16 to 33 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western hemlock/queencup beadlelily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 8 inches; ashy silt loam

Bw2—8 to 17 inches; gravelly ashy silt loam

2BC—17 to 33 inches; extremely cobbly loam

2C1—33 to 43 inches; extremely gravelly fine sandy loam

2C2—43 to 60 inches; extremely gravelly fine sandy loam

2C3—60 to 64 inches; extremely gravelly fine sandy loam

Dissimilar Minor Components

Ahrs soils, moist

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Huckle soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Latour soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Concave

Across-slope shape: Convex

780—Ardenvoir-Huckle-Saint Maries, dry complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,400 to 3,900 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Ardenvoir and similar soils: 30 percent

Huckle and similar soils: 30 percent

Saint Maries, dry, and similar soils: 30 percent

Dissimilar minor components: 10 percent

Characteristics of Ardenvoir

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): Southeast

Aspect (range): East to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 11 inches; gravelly ashy silt loam

Bw2—11 to 19 inches; gravelly loam

C1—19 to 39 inches; very cobbly loam

C2—39 to 48 inches; extremely cobbly loam

Cr—48 to 58 inches; bedrock

Characteristics of Huckle

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): North

Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 35 to 65 percent

Depth to restrictive feature: 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material

A—3 to 4 inches; ashy silt loam

Bw1—4 to 8 inches; ashy silt loam

Bw2 and Bw3—8 to 19 inches; ashy silt loam over gravelly ashy silt loam

2Bw4—19 to 28 inches; very cobbly silt loam

2BC—28 to 38 inches; extremely cobbly silt loam

2C—38 to 47 inches; extremely cobbly loam

2Cr—47 to 57 inches; bedrock

Characteristics of Saint Maries, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): West

Aspect (range): West to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from siltstone and quartzite

Slope range: 35 to 65 percent
Depth to restrictive feature: None within a depth of 60 inches
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 5 inches; gravelly ashy silt loam
AB—5 to 9 inches; gravelly ashy silt loam
Bw1—9 to 17 inches; extremely cobbly ashy silt loam
Bw2—17 to 24 inches; extremely cobbly silt loam
BC—24 to 32 inches; extremely cobbly silt loam
C1—32 to 50 inches; extremely cobbly loam
C2—50 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Ardenvoir soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Rasser soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

781—Ahrs, moist-Honeyjones, warm complex, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains
Major land resource area (MLRA): 43A—Northern Rocky Mountains
Elevation: 3,090 to 4,670 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 80 to 110 days

Map Unit Composition

Ahrs, moist, and similar soils: 45 percent
Honeyjones, warm, and similar soils: 35 percent
Dissimilar minor components: 20 percent

Characteristics of Ahrs, Moist

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite
Slope range: 45 to 75 percent
Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 8e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 3 inches; slightly decomposed plant material
A—3 to 12 inches; cobbly ashy silt loam
Bw1—12 to 22 inches; very cobbly ashy silt loam
2Bw2—22 to 35 inches; very gravelly loam
2Bw3—35 to 48 inches; extremely gravelly loam
2C—48 to 60 inches; extremely cobbly loam

Characteristics of Honeyjones, Warm

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): Northwest to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Soil Survey of Benewah County Area, Idaho, Western Part

Slope range: 35 to 60 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Honeyjones soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Saint Maries soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Lotuspoint soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

782—Ardenvoir, dry-Cassyhill complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,190 to 3,600 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 50 degrees F

Frost-free period: 90 to 140 days

Map Unit Composition

Ardenvoir, dry, and similar soils: 45 percent

Cassyhill and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Ardenvoir, Dry

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 35 to 65 percent

Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 40 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; gravelly ashy silt loam

AB—3 to 11 inches; gravelly ashy silt loam
Bw—11 to 18 inches; very gravelly loam
C1—18 to 32 inches; extremely gravelly loam
C2—32 to 41 inches; extremely cobbly loam
C3—41 to 60 inches; extremely stony loam
Cr—60 to 70 inches; bedrock

Characteristics of Cassyhill

Setting

Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock
Slope range: 35 to 65 percent
Depth to restrictive feature: 10 to 20 inches to lithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Very low (about 1.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Ponderosa pine/common snowberry (CN170)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
A1—1 to 7 inches; very gravelly ashy silt loam
A2—7 to 11 inches; very gravelly ashy loam
C—11 to 14 inches; extremely channery loam
R—14 to 24 inches; bedrock

Dissimilar Minor Components

Lotuspoint soils, stony surface

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave

Arson soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 5 percent

784—Pinecreek, moist-Lotuspoint complex, 35 to 65 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 4,600 feet

Mean annual precipitation: 26 to 40 inches

Mean annual air temperature: 44 to 49 degrees F

Frost-free period: 90 to 140 days

Map Unit Composition

Pinecreek, moist, and similar soils: 45 percent

Lotuspoint and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Pinecreek, Moist

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Aspect (representative): Southeast

Aspect (range): East to southwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A1—2 to 6 inches; gravelly ashy silt loam

A2—6 to 12 inches; gravelly ashy silt loam

Bw1—12 to 19 inches; gravelly ashy silt loam

Bw2—19 to 24 inches; gravelly ashy silt loam

2Bw3—24 to 30 inches; very gravelly loam

2C—30 to 70 inches; extremely flaggy loam over extremely cobbly loam over extremely gravelly loam

Characteristics of Lotuspoint

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): South to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over residuum derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 20 to 40 inches to lithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 4 inches; gravelly ashy silt loam

AB—4 to 10 inches; stony ashy silt loam

2Bw1—10 to 16 inches; extremely stony silt loam

2Bw2—16 to 26 inches; extremely stony loam

2R—26 to 36 inches; bedrock

Dissimilar Minor Components

Pinecreek soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Ardenvoir soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Cassyhill soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

791—Latour gravelly medial silt loam, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 4,400 to 5,000 feet

Mean annual precipitation: 40 to 45 inches

Mean annual air temperature: 38 to 42 degrees F

Frost-free period: 35 to 60 days

Map Unit Composition

Latour and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Latour

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Concave

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from metasedimentary rock

Slope range: 35 to 75 percent

Depth to restrictive feature: 12 to 25 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.7 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Mountain hemlock/queencup beadlily-beargrass phase (CN687)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; gravelly medial silt loam

Bw1 and Bw2—3 to 14 inches; gravelly medial silt loam over very cobbly medial silt loam

Bw3 and Bw4—14 to 40 inches; very flaggy medial silt loam over extremely cobbly medial silt loam

2C—40 to 60 inches; extremely stony sandy loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Boulder creek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Saint Maries soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

800—Rock outcrop

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Map unit composition: Rock outcrop—100 percent

Description of areas: Exposures of bare bedrock

Land capability subclass: 8

801—Pits, gravel

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Map unit composition: Pits, gravel—100 percent

Land capability subclass: 8

Typical profile: C—0 to 60 inches; gravel

802—Kingspeak-Urban land complex, 5 to 35 percent slopes

Map Unit Setting

General landscape: Basalt plateaus, foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,130 to 2,410 feet

Mean annual precipitation: 28 to 31 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Kingspeak and similar soils: 50 percent

Urban land: 35 percent

Dissimilar minor components: 15 percent

Characteristics of Kingspeak

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): Northwest

Aspect (range): Northwest to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over alluvium and/or lacustrine deposits

Slope range: 5 to 35 percent

Depth to restrictive feature: None within a depth of 60 inches

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 10.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 4e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw—3 to 10 inches; ashy silt loam

E/Bt—10 to 30 inches; silt loam

Bt/E—30 to 60 inches; silt loam

Characteristics of Urban Land

Description of areas: Streets, parking lots, buildings, and other structures
Land capability subclass: 8

Dissimilar Minor Components

Grangemont soils, warm

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

Reggear soils, moist

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, footslopes

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Shayhill soils

Percentage of map unit: 5 percent

Landform: Structural benches

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Concave

900—Water

Major land resource area (MLRA): 44A—Northern Rocky Mountain Valleys

Map unit composition: Water—100 percent

Land capability subclass: 8

901—Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes

Map Unit Setting

General landscape: Mountains, hills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 26 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Map Unit Composition

Aquandic Endoaquepts and similar soils: 40 percent

Aquic Udifluvents and similar soils: 40 percent

Dissimilar minor components: 20 percent

Characteristics of Aquandic Endoaquepts

Setting

Landform: Stream terraces, flood plains
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (range): All aspects

Properties and Qualities

Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Depth to restrictive feature: 30 to 48 inches to strongly contrasting textural stratification
Drainage class: Poorly drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: Frequent (see Water Features table)
Ponding frequency: None
Seasonal high water table (minimum depth): About 5 to 20 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 5w
Forest Service habitat type: Western hemlock/wild ginger (CN575)

Typical profile

A—0 to 11 inches; ashy silt loam
Bw—11 to 40 inches; silt loam
2C—40 to 60 inches; extremely gravelly loam

Characteristics of Aquic Udifluvents

Setting

Landform: Stream terraces, flood plains
Geomorphic position (two-dimensional): Toeslopes
Geomorphic position (three-dimensional): Treads
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (range): All aspects

Properties and Qualities

Parent material: Mixed alluvium
Slope range: 0 to 4 percent
Depth to restrictive feature: 22 to 30 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: Occasional (see Water Features table)
Ponding frequency: None
Seasonal high water table (minimum depth): About 20 to 35 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.2 inches)

Interpretive groups

Land capability subclass (nonirrigated): 3w

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

A and AB—0 to 8 inches; silt loam

Bw—8 to 22 inches; gravelly silt loam

2C—22 to 60 inches; silt loam over extremely cobbly loamy coarse sand

Dissimilar Minor Components

Porrett soils

Percentage of map unit: 10 percent

Landform: Drainageways

Geomorphic position (two-dimensional): Toeslopes

Down-slope shape: Concave

Across-slope shape: Linear

Endoaquolls

Percentage of map unit: 5 percent

Landform: Drainageways, stream terraces, flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Treads

Down-slope shape: Concave

Across-slope shape: Concave

Lovell soils

Percentage of map unit: 5 percent

Landform: Flood plains

Geomorphic position (two-dimensional): Toeslopes

Geomorphic position (three-dimensional): Risers

Down-slope shape: Linear

Across-slope shape: Linear

902—Ahrs gravelly ashy silt loam, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,820 to 4,860 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Ahrs and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Ahrs

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): North

Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 35 to 75 percent

Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam

2C1—30 to 41 inches; extremely cobbly loam

2C2—41 to 51 inches; extremely cobbly silt loam

2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Pinecreek soils

Percentage of map unit: 10 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Honeyjones soils, warm

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Lotuspoint soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Upper third of mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

903—Ahrs-Pinecreek association, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,020 to 4,590 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 110 days

Map Unit Composition

Ahrs and similar soils: 50 percent

Pinecreek and similar soils: 30 percent

Dissimilar minor components: 20 percent

Characteristics of Ahrs

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Aspect (representative): East

Aspect (range): Northwest to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 35 to 65 percent

Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 6 inches; gravelly ashy silt loam

Bw1—6 to 14 inches; very gravelly ashy silt loam

Bw2—14 to 23 inches; very gravelly ashy silt loam

2BC—23 to 30 inches; very cobbly loam
2C1—30 to 41 inches; extremely cobbly loam
2C2—41 to 51 inches; extremely cobbly silt loam
2C3—51 to 60 inches; extremely cobbly loam

Characteristics of Pinecreek

Setting

Landform: Mountain slopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): South
Aspect (range): Southeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from quartzite
Slope range: 35 to 75 percent
Depth to restrictive feature: 25 to 35 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 7.4 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A1—2 to 6 inches; gravelly ashy silt loam
A2—6 to 12 inches; gravelly ashy silt loam
Bw1—12 to 19 inches; gravelly ashy silt loam
Bw2—19 to 24 inches; gravelly ashy silt loam
2Bw3—24 to 30 inches; very gravelly loam
2C—30 to 70 inches; extremely flaggy loam over extremely cobbly loam over extremely gravelly loam

Dissimilar Minor Components

Lotuspoint soils

Percentage of map unit: 8 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Upper third of mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Honeyjones soils, warm

Percentage of map unit: 7 percent
Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

Cassyhill soils

Percentage of map unit: 3 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Rock outcrop

Percentage of map unit: 2 percent

907—Honeyjones ashy silt loam, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,900 to 4,780 feet

Mean annual precipitation: 30 to 42 inches

Mean annual air temperature: 42 to 44 degrees F

Frost-free period: 80 to 100 days

Map Unit Composition

Honeyjones and similar soils: 80 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): North to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 35 to 75 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western hemlock/queencup beadlelily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam

2C2—35 to 47 inches; extremely cobbly loam

2C3—47 to 60 inches; extremely stony silt loam

Dissimilar Minor Components

Ahrs soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Honeyjones, warm soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Huckle soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils

Percentage of map unit: 3 percent

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Saint Maries soils

Percentage of map unit: 2 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

908—Honeyjones-Ahrs association, 35 to 75 percent slopes

Map Unit Setting

General landscape: Mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 3,000 to 4,200 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Honeyjones and similar soils: 45 percent

Ahrs and similar soils: 35 percent

Dissimilar minor components: 20 percent

Characteristics of Honeyjones

Setting

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): North to northeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 35 to 75 percent

Depth to restrictive feature: 19 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 7.3 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 7 inches; ashy silt loam

Bw2—7 to 19 inches; ashy silt loam

2Bw3—19 to 24 inches; very gravelly silt loam

2C1—24 to 35 inches; extremely gravelly loam
2C2—35 to 47 inches; extremely cobbly loam
2C3—47 to 60 inches; extremely stony silt loam

Characteristics of Ahrs

Setting

Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): West to southeast (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from quartzite
Slope range: 35 to 75 percent
Depth to restrictive feature: 23 to 41 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Low (about 5.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Grand fir/queencup beadlily (CN520)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
Oe—1 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; gravelly ashy silt loam
Bw1—6 to 14 inches; very gravelly ashy silt loam
Bw2—14 to 23 inches; very gravelly ashy silt loam
2BC—23 to 30 inches; very cobbly loam
2C1—30 to 41 inches; extremely cobbly loam
2C2—41 to 51 inches; extremely cobbly silt loam
2C3—51 to 60 inches; extremely cobbly loam

Dissimilar Minor Components

Honeyjones soils, dry

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Linear
Across-slope shape: Convex

Huckle soils

Percentage of map unit: 5 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Convex

Hugus soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Lower third of mountainflanks, side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Pinecreek soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Concave

913—Hobo ashy silt loam, 15 to 40 percent slopes

Map Unit Setting

General landscape: Foothills, basalt plateaus

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,800 to 3,600 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 80 to 110 days

Map Unit Composition

Hobo and similar soils: 85 percent

Dissimilar minor components: 15 percent

Characteristics of Hobo

Setting

Landform: Hills

Geomorphic position (two-dimensional): Shoulders, backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Aspect (representative): North

Aspect (range): North to east (clockwise)

Properties and Qualities

Parent material: Volcanic ash over alluvium and/or colluvium derived from
metasedimentary rock

Slope range: 15 to 40 percent

Depth to restrictive feature: 42 to 52 inches to strongly contrasting textural
stratification

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 14 to 22 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): High (about 9.8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western hemlock/queencup beadlily (CN570)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

Oe—1 to 2 inches; moderately decomposed plant material

A—2 to 3 inches; ashy silt loam

Bw1—3 to 8 inches; ashy silt loam

Bw2—8 to 18 inches; ashy silt loam

2BEt—18 to 22 inches; silt loam

2E/Bt—22 to 30 inches; silt loam

2Bt/E—30 to 44 inches; gravelly loam

2BCt—44 to 60 inches; very gravelly loam

Dissimilar Minor Components

Honeyjones soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Linear

Across-slope shape: Linear

Hugus soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Hobo soils, warm

Percentage of map unit: 3 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes, footslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Linear

Across-slope shape: Linear

Threebear soils

Percentage of map unit: 2 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Linear

Across-slope shape: Linear

Ac1—Arson-Carlinton complex, 8 to 35 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,660 to 3,600 feet

Mean annual precipitation: 26 to 34 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 95 to 130 days

Map Unit Composition

Arson and similar soils: 40 percent

Carlinton and similar soils: 35 percent

Dissimilar minor components: 25 percent

Characteristics of Arson

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Summits, backslopes, shoulders

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): Southwest

Aspect (range): South to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 12 to 35 percent

Depth to restrictive feature: 48 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 6 inches; ashy silt loam

BA—6 to 10 inches; ashy silt loam

Bt1—10 to 22 inches; silt loam

2Bt2—22 to 33 inches; gravelly silt loam

2C—33 to 48 inches; extremely gravelly silt loam

2Cr—48 to 60 inches; bedrock

Characteristics of Carlinton

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Concave
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess
Slope range: 8 to 35 percent
Depth to restrictive feature: 31 to 46 inches to a fragipan
Drainage class: Moderately well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): Perched at about 8 to 26 inches (see Water Features table)
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Grand fir/ninebark (CN506)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 8 inches; ashy silt loam
Bw—8 to 19 inches; silt loam
B/E—19 to 31 inches; silt loam
E/B—31 to 39 inches; silt loam
Btxb—39 to 60 inches; silty clay loam

Dissimilar Minor Components

Arson soils, dry

Percentage of map unit: 10 percent
Landform: Mountain slopes, hills
Geomorphic position (two-dimensional): Summits, backslopes, shoulders
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Minaloosa soils

Percentage of map unit: 10 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Side slopes
Down-slope shape: Concave
Across-slope shape: Linear

Grangemont soils

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits, backslopes, footslopes
Geomorphic position (three-dimensional): Head slopes, interfluves, side slopes, nose slopes
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave

Ac2—Arson-Carlinton complex, dry, 8 to 35 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,550 to 3,650 feet

Mean annual precipitation: 25 to 34 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 95 to 130 days

Map Unit Composition

Arson, dry, and similar soils: 45 percent

Carlinton, dry, and similar soils: 30 percent

Dissimilar minor components: 25 percent

Characteristics of Arson, Dry

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Summits, backslopes, shoulders

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): Northeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 8 to 35 percent

Depth to restrictive feature: 48 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 6 inches; ashy silt loam

BA—6 to 10 inches; ashy silt loam

Bt1—10 to 22 inches; silt loam

2Bt2—22 to 33 inches; gravelly silt loam

2C—33 to 48 inches; extremely gravelly silt loam

2Cr—48 to 60 inches; bedrock

Characteristics of Carlinton, Dry

Setting

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Concave

Across-slope shape: Linear, convex

Aspect (representative): South

Aspect (range): Northeast to west (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 8 to 35 percent

Depth to restrictive feature: 31 to 46 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 8 to 26 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 8 inches; ashy silt loam

Bw—8 to 19 inches; silt loam

B/E—19 to 31 inches; silt loam

E/B—31 to 39 inches; silt loam

Btxb—39 to 60 inches; silty clay loam

Dissimilar Minor Components

Arson soils

Percentage of map unit: 10 percent

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Summits, backslopes, shoulders

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Minaloosa soils, dry

Percentage of map unit: 10 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave

Across-slope shape: Linear

Carlinton soils

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Summits

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Concave

Across-slope shape: Linear, convex

An4—Arson-Minaloosa complex, 25 to 60 percent slopes

Map Unit Setting

General landscape: Foothills, mountains

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,720 to 3,720 feet

Mean annual precipitation: 23 to 37 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 95 to 130 days

Map Unit Composition

Arson, dry, and similar soils: 55 percent

Minaloosa, dry, and similar soils: 20 percent

Dissimilar minor components: 25 percent

Characteristics of Arson, Dry

Setting

Landform: Mountain slopes, hills

Geomorphic position (two-dimensional): Summits, backslopes, shoulders

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Convex

Aspect (representative): South

Aspect (range): East to northwest (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 25 to 60 percent

Depth to restrictive feature: 48 to 60 inches to paralithic rock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): More than 72 inches

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 8.5 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e

Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 6 inches; ashy silt loam

BA—6 to 10 inches; ashy silt loam

Bt1—10 to 22 inches; silt loam

2Bt2—22 to 33 inches; gravelly silt loam

2C—33 to 48 inches; extremely gravelly silt loam

2Cr—48 to 60 inches; bedrock

Characteristics of Minaloosa, Dry

Setting

Landform: Hills, mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Side slopes

Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): South
Aspect (range): All aspects

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock
Slope range: 25 to 60 percent
Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 6.9 inches)

Interpretive groups

Land capability subclass (nonirrigated): 7e
Forest Service habitat type: Douglas-fir/ninebark (CN260)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; ashy silt loam
AB—5 to 10 inches; gravelly ashy silt loam
Bw and Bt—10 to 32 inches; very gravelly silt loam over very gravelly loam
BCt—32 to 41 inches; extremely gravelly loam
C—41 to 60 inches; extremely gravelly loam

Dissimilar Minor Components

McCrosket soils

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Concave
Across-slope shape: Convex

Arson soils

Percentage of map unit: 5 percent
Landform: Mountain slopes, hills
Geomorphic position (two-dimensional): Summits, backslopes, shoulders
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Convex

Carlinton soils, dry

Percentage of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Concave
Across-slope shape: Linear, convex

Chesley soils

Percentage of map unit: 5 percent

Landform: Mountain slopes

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks, interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear, convex

Rs2—Reggear-Stewah complex, 10 to 35 percent slopes

Map Unit Setting

General landscape: Foothills

Major land resource area (MLRA): 43A—Northern Rocky Mountains

Elevation: 2,700 to 3,400 feet

Mean annual precipitation: 26 to 28 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 85 to 120 days

Map Unit Composition

Reggear, moist, and similar soils: 40 percent

Stewah and similar soils: 25 percent

Dissimilar minor components: 35 percent

Characteristics of Reggear, Moist

Setting

Landform: Hills

Geomorphic position (two-dimensional): Summits, shoulders

Geomorphic position (three-dimensional): Interfluves

Down-slope shape: Concave

Across-slope shape: Linear, convex

Aspect (representative): West

Aspect (range): Southeast to north (clockwise)

Properties and Qualities

Parent material: Volcanic ash over loess

Slope range: 10 to 35 percent

Depth to restrictive feature: 24 to 39 inches to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Flooding frequency: None

Ponding frequency: None

Seasonal high water table (minimum depth): Perched at about 18 to 30 inches (see Water Features table)

Salinity (maximum): Not saline

Sodicity (maximum): Not sodic

Available water capacity (entire profile): Moderate (about 6.6 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e

Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 4 inches; ashy silt loam

Bw—4 to 8 inches; ashy silt loam

EB—8 to 18 inches; silt loam
Bt/E—18 to 31 inches; silt loam
Btxb—31 to 60 inches; silty clay loam

Characteristics of Stewah

Setting

Landform: Hills
Geomorphic position (two-dimensional): Backslopes
Geomorphic position (three-dimensional): Mountainflanks
Down-slope shape: Convex
Across-slope shape: Linear, convex
Aspect (representative): West
Aspect (range): Southeast to north (clockwise)

Properties and Qualities

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock
Slope range: 10 to 35 percent
Depth to restrictive feature: 10 to 20 inches to strongly contrasting textural stratification; 53 to 60 inches to paralithic rock
Drainage class: Well drained
Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high
Flooding frequency: None
Ponding frequency: None
Seasonal high water table (minimum depth): More than 72 inches
Salinity (maximum): Not saline
Sodicity (maximum): Not sodic
Available water capacity (entire profile): Moderate (about 8 inches)

Interpretive groups

Land capability subclass (nonirrigated): 6e
Forest Service habitat type: Western redcedar/queencup beadlily (CN530)

Typical profile

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; ashy silt loam
Bw—5 to 10 inches; ashy silt loam
Bt1—10 to 16 inches; silt loam
2Bt2—16 to 25 inches; gravelly silt loam
2Bt3 and 2C—25 to 59 inches; very cobbly silt loam over extremely gravelly silt loam over extremely cobbly silt loam
2Cr—59 to 69 inches; bedrock

Dissimilar Minor Components

Carlinton soils

Percentage of map unit: 10 percent
Landform: Hills
Geomorphic position (two-dimensional): Summits
Geomorphic position (three-dimensional): Interfluves
Down-slope shape: Concave
Across-slope shape: Linear, convex

Chesley soils

Percentage of map unit: 10 percent
Landform: Mountain slopes
Geomorphic position (two-dimensional): Backslopes

Soil Survey of Benewah County Area, Idaho, Western Part

Geomorphic position (three-dimensional): Mountainflanks, interfluves, side slopes

Down-slope shape: Convex

Across-slope shape: Linear, convex

Kauder soils

Percentage of map unit: 10 percent

Landform: Interfluves, hillslopes

Geomorphic position (two-dimensional): Summits, backslopes, footslopes

Geomorphic position (three-dimensional): Interfluves, side slopes, nose slopes

Down-slope shape: Linear, concave

Across-slope shape: Linear, convex

Stewah soils, dry

Percentage of map unit: 5 percent

Landform: Hills

Geomorphic position (two-dimensional): Backslopes

Geomorphic position (three-dimensional): Mountainflanks

Down-slope shape: Convex

Across-slope shape: Linear, convex

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops

Kelly Olson, resource conservationist, Natural Resources Conservation Service.

About 82,000 acres of the survey area is cropland. Approximately 75 percent of the cropland is in the western third of the survey area. The remaining 25 percent is on flood plains, terraces, and structural benches adjacent to the major rivers and streams in the northern and eastern part of the area. The cropland is as varied as the soils in the area (figs. 8 and 9). Most is nonirrigated, but supplemental sprinkler irrigation has been used on limited acreage. The best land for growing annually tilled crops is in general soil map unit 8. The soils in this unit were originally under prairie vegetation, and they are slightly warmer and more productive than those in areas of cutover forestland. The average annual precipitation on the cropland is 17 to 31 inches. The cool climate and short growing season play a major part in determining production of the dominantly cool-season crops. Crop production also depends heavily on stored winter precipitation.

Two-year or three-year crop rotations are typical. The two-year rotation consists of winter wheat followed by a spring legume of peas, lentils, or garbanzo beans. The three-year rotation is winter wheat; spring grain, commonly spring wheat or barley; followed by a legume (fig. 10). After many years of cultivation, the pH of the soils used as cropland has dropped and some of the soils can no longer grow legumes.

A two-year rotation consisting of winter wheat and spring grain is used on these soils. Most nitrogen fertilizer is applied as anhydrous or aqua ammonia. Nitrogen



Figure 8.—Cropland in an area of Setters-Taney complex, 3 to 20 percent slopes, about 3 miles east of DeSmet.



Figure 9.—Cropland in an area of Naff-Thatuna complex, 3 to 8 percent slopes, and Naff-Thatuna complex, 8 to 25 percent slopes. Area of McCrosket-Ardenvoir association, 35 to 65 percent slopes, on forested mountain slopes in background.



Figure 10.—Wheat in an area of Latahco-Lovell complex, 0 to 3 percent slopes, north of Tensed. Area of Larkin silt loam, 12 to 20 percent slopes, in middle and area of McCrosket-Tekoa association, 35 to 65 percent slopes, on forested mountain slopes in background.

is typically shanked to a depth of 4 to 6 inches with 12- to 16-inch spacing. Use of commercial fertilizer and soil erosion have contributed to the acidification of the soils. Slow permeability and a seasonal high water table increase the risk of soil compaction on most of the soils in the area used as cropland. Site specific recommendations for reducing the risk of compaction and maintaining optimal soil pH can be obtained from the local office of the Natural Resources Conservation Service.

Erosion is a concern on all of the soils in the survey area; however, those that have steeper slopes and higher precipitation are subject to the greatest risk. The most critical erosion period is late in winter, during periods of snowmelt and rainfall on saturated or frozen soils. Loss of topsoil through erosion is a serious concern on most of the cropland; productivity is reduced as the surface layer is lost. Concentrated flow erosion is a serious problem in the survey area. It creates deep gullies in areas that have moderate to steep slopes, dissecting the fields.

Tillage practices vary from conventional tilling and planting operations to no-till planting. Conservation tillage is most common. It consists of preparing a field without the use of a moldboard plow. Conservation tillage helps to increase the content of organic matter in the soil. Higher soil organic matter increases soil microbial activity, which improves the stability of soil aggregates, aeration of the soil, and infiltration and movement of water throughout the soil. Residue management practices that keep the soil surface covered help to protect the cropland from sheet and rill erosion.

The Conservation Reserve Program (CRP) is a land conservation program administered by the Farm Service Agency (FSA). In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve the health and quality of the soils. Currently, there are 8,665 acres of land enrolled in the CRP program in the survey area. The CRP helps to protect the land from erosion by maintaining a permanent cover on the soils.

Weeds are a major concern on the cropland, including orange and yellow hawkweed, oxeye daisy, ventenata, and sweet briar rose.

The cropland on flood plains and terraces is used mainly for the production of hay and pasture. The cropland on structural benches is dominantly cutover forestland. It is planted dominantly to grasses and legumes for pasture and hay, but some areas are used for the production of small grain. Many small meadows in the heavily forested eastern part of the survey area are planted to grasses and legumes for hay.

Crop productivity indices provide an estimate of the relative productivity of a map unit component for the principal crops grown in the area. The indices are numerical values that range from 0.00 to 1.00. The higher the crop productivity index (CPI) value, the higher the potential productivity of a crop. Based on the CPI value, a narrative rating is also assigned. The narrative ratings are *low*, less than or equal to 0.20; *moderately low*, 0.21 to 0.40; *moderate*, 0.41 to 0.60; *moderately high*, 0.61 to 0.80; and *high*, greater than or equal to 0.81.

Crop productivity indices are used instead of estimated yields because of the difficulty of collecting accurate, reliable crop yield data. Also, development of new crop varieties and advancement in crop production technology can result in estimated yields becoming obsolete over time.

The criteria for the crop productivity indices were developed by soil scientists and agronomists familiar with the soils, crops, and crop production practices in the area. The National Commodity Crop Productivity Index (NCCPI) was used as a starting point, and it was modified for local soil and climatic conditions. More information on the NCCPI is available at http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_050734.pdf.

The criteria can be grouped into five categories—soil physical properties, soil chemical properties, climate, landscape, and soil water. Soil physical properties include the content of rock fragments and depth to root-restricting layers. Soil chemical

properties include the content of organic matter, sodium adsorption ratio, electrical conductivity, pH, content of calcium carbonate, and cation-exchange capacity. Climate properties include the number of frost-free days and the mean annual precipitation. Landscape criteria include steepness of slope, stones and boulders on the soil surface, depth and duration of the water table during the growing season, frequency and duration of flooding during the growing season, and frequency and duration of ponding during the growing season. The soil water criterion is based on the available water capacity.

Table 5 provides productivity indices for nonirrigated small grain, principally wheat and barley. Table 6 provides productivity indices for nonirrigated hay, principally alfalfa hay, grass hay, and wild hay.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2*e*. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*,

used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

The capability classification of the soils in this survey area is given in the section "Detailed Soil Map Units" and in [table 7](#).

Prime Farmland and Other Important Farmland

[Table 8](#) lists the map units in the survey area that are considered prime farmland and farmland of statewide importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmland, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

In some areas, land that does not meet the criteria for prime farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime

farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 9, 10, and 11 show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous

wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include saturated hydraulic conductivity (Ksat), depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of table 9, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include saturated hydraulic conductivity (Ksat), depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in table 10 are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, saturated hydraulic conductivity (Ksat), slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film.

Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in table 10 are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in table 11 are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Saturated hydraulic conductivity (Ksat) and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in table 11 are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, saturated hydraulic conductivity (Ksat), depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Grazing Land

By Barry Nord and Sydney Yuncevich, range conservationists, Natural Resources Conservation Service.

The survey area has approximately 100,000 acres of grazing land ([fig. 11](#)). Of this, about 1 percent supports native rangeland vegetation. About 14 percent supports introduced pasture species, and 85 percent supports cutover forestland. Most of the grazing land is privately owned.

The grazing land is used for livestock grazing, wildlife habitat, and recreation and as watershed for the St. Joe River, Hangman Creek, and Lake Coeur d'Alene. Livestock operations include cow-calf and yearling operations. Most of the calves are sold in fall or as yearlings in spring. The average operation is about 200 to 1,000 acres and



Figure 11.—Area of pasture and rangeland near Liberty Butte. Gravel pit in foreground. Dark green area in middle is pasture in an area of Schumacher silt loam, 5 to 25 percent slopes, and light green area is rangeland in an area of LibertyButte-Tekoa complex, 5 to 30 percent slopes, and Schumacher-Tekoa complex, 25 to 45 percent slopes. Forested area of McCrosket-Tekoa association, 35 to 65 percent slopes, in background.

includes nonirrigated farming and forestland grazing. There are numerous small ranchettes and farms with cattle, horses, and other livestock. The grazing season extends from May through November. Supplemental feed is used for livestock in winter, which lasts 5 to 6 months. Calving usually occurs in March through May.

Cutover forestland has been logged in the past; seeded to desirable forage species, such as timothy, orchardgrass, bromes, and clovers; and then grazed. Brush and trees, such as snowberry, oceanspray, and ponderosa pine, naturally become re-established; thus, management is needed to maintain the areas of open grazing land.

Much of the native vegetation in the areas of nonforested grazing land has been replaced by introduced perennial species or invasive species or has been changed as a result of farming practices. These are small, isolated areas surrounded by cropland. The vegetation includes dominantly perennial grasses and forbs with some shrubs and trees. Bluebunch wheatgrass and Idaho fescue are the dominant grasses. When these areas become degraded, the perennial bunchgrasses are replaced with sod-forming bluegrasses and annual grasses and the abundance of invasive sweetbriar rose increases.

In areas that have similar climate and topography, differences in the kind and amount of grazing land are closely related to the kind of soil. Effective management is based on the relationship between the soils and vegetation and water.

Table 12 shows, for each soil that supports vegetation, the ecological site or habitat type; the total annual production of vegetation in favorable, normal, and unfavorable years; the characteristic vegetation; and the average percentage of each species. An explanation of the column headings in the table follows.

An *ecological site or habitat type* is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over

time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of the site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated; each is influenced by the others. The plant community on an ecological site or habitat type is typified by an association of species that differs from that of other ecological sites or habitat types in the kind and/or proportion of species or in total production.

Detailed soil map unit components are correlated to a Natural Resources Conservation Service ecological site or a Forest Service habitat type. The components correlated to an ecological site are identified by a name and number such as DRY MEADOW (R009XY019ID). The components correlated to a habitat type are identified by a name and number such as grand fir/ninebark (CN506). Descriptions of the habitat types are in "Forest Habitat Types of Northern Idaho: A Second Approximation" (Cooper and others, 1991). Descriptions of the ecological sites are available in local offices of the Natural Resources Conservation Service. The ecological site or habitat type for most soil map unit components is given in table 12 and in the section "Detailed Soil Map Units" under the heading "Interpretive groups." An ecological site or habitat type has not been developed for detailed soil map units 141, 142, 143, 144, 145, 150, 155, 156, 157, and 158. The soils in these map units are of limited extent and have altered hydrology, and the native plant communities have been replaced with plant species suitable for use as hay and pasture.

Total production is the amount of vegetation that can be expected to grow annually in a well managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content and are given only for components correlated to an ecological site.

Characteristic vegetation (the grasses, forbs, shrubs, and trees that make up most of the potential natural plant community on each soil) is listed by common name. Under *Composition*, the expected percentage of the total annual production is given for each species making up the characteristic vegetation. For the forested soils, the expected percent canopy cover is given for each species. For the rangeland soils, the expected percentage for each species is given by percent dry weight. The amount that can be used as forage depends on the kinds of grazing animals and on the grazing season.

Rangeland has also been converted to pasture for hay with introduced species such as orchardgrass, timothy, perennial bromes, tall fescue, and bluegrasses. Meadows and flood plains associated with the numerous streams and rivers in the area are highly productive because of the periodic flooding and high water table. Reed canarygrass and reedtop commonly are the dominant species. The high water table associated with these areas should be considered in grazing management. Compaction of the soil, reduced vigor, and subsequent replacement of desirable species is common in areas where animals are allowed to graze when the soils are too wet and where the plants and soils are not allowed to fully recovery after grazing.

Change occurs over time and is a result of environmental factors, including natural disturbances. Retrogression is the degradation or shift away from the historic plant

community, and it is a reflection of changes in site conditions. Commonly, changes in site condition are irreversible and a different plant community develops that may be resistant to change. An example is low-quality annual range, which is difficult to convert back to more productive range without a high input of resources.

Range health assessments provide information on the function of the ecological processes. Range health is the degree to which the integrity of the soil, vegetation, water, and air as well as the ecological processes of the rangeland ecosystem are balanced and sustained. Ecological attributes are indicators of range health. These attributes include soil site stability, hydrologic function, and integrity of the biotic community. Because the attributes are difficult to observe or measure in the field, indicators are used as an index of an attribute. Seventeen ecological indicators have been identified, including water flow patterns, resistance of the soil surface to erosion, plant community composition and distribution relative to infiltration and runoff, amount of litter, annual production, invasive plants, and reproductive capability of perennial plants. Range health assessments help land managers identify areas that are potentially at risk for degradation and other problems.

Grazing Systems

Prescribed grazing is the management of livestock and other browsing animals to achieve specific objectives. It is based on the objectives of the landowner, resource capabilities, and conservation needs. It helps to maintain or improve the health and vigor of selected plants; maintain a stable, desired plant community; provide food, cover, and shelter for livestock and wildlife; improve water quality and quantity; ensure a healthy, sustainable soil condition; and promote economic stability.

Degraded communities commonly are a result of improper grazing management and stocking rates. Continuous grazing and heavy use early and late in the growing season put pressure on the vegetation by not allowing for regrowth and recovery periods. Annual species increase and displace the native perennial species.

The major considerations in planning and implementing a prescribed grazing system are determining the key forage species and then ensuring that the grazing system allows enough time for regrowth and recovery after grazing. A key species is a palatable species that provides excellent forage and makes up a high percentage of the potential plant community. Orchardgrass and timothy are examples of key species that have been seeded in pastures. Bluebunch wheatgrass and Idaho fescue are examples of key species in native areas. Plant and animal requirements, topography, and management objectives should be considered before determining grazing practices such as deferment, rest, rotation, and proper season, length, and level of use. The timing and length of the grazing period, level of forage use, and deferment of grazing until after critical periods of plant growth affect plant responses. Generally, maintaining a stubble height of at least 4 inches for perennial grasses and allowing plants to go to seed keeps forage grasses healthy and minimizes weeds. Desired results are achieved by applying these practices in a specific sequence and monitoring them over a period of years. At a minimum, grazing management should protect the soil and plant resource base, provide for water conservation, and promote improved water quality. Control of invasive species is necessary for optimum sustained production.

Wildlife use areas of rangeland, pastureland, and forestland for food and cover. Forage in winter is most limiting, particularly during severe winters. The more shallow soils on open, south-facing slopes provide critical forage in winter. Riparian areas provide important and diverse wildlife habitat as well as water, shade, and forage for livestock. Livestock tend to stay near these areas; therefore, periodic grazing deferment is critical. The recovery time of riparian vegetative after grazing is relatively short because of the presence of a perennial or shallow water table. Maintaining a stubble height of at least 4 inches is recommended to maximize healthy perennial

grasses and minimize weeds. Healthy riparian areas have vigorous, complex communities of shrubs, forbs, grasses, and grasslike plants. They provide a buffer during periods of high waterflow and a connection to flood plains, and they contribute to the quality of instream aquatic habitat.

Forestland History, Ecology, Productivity, and Management

By Frank Gariglio, State forester, Natural Resources Conservation Service.

Forestland History and Ecology

The forests in the survey area are under a relatively warm and dry climatic regime as compared to most other forestland in northern Idaho. About 56 percent of the area is currently forested. Historically, more of the area was forested; however, much of the forestland has been cleared and converted to agricultural uses. Depending on the objectives of the land manager, this land could be replanted to suitable conifer species and become viable plantations. About 42 percent of the present forestland is owned by industrial and investment timber companies. Nonindustrial forest landowners own another 36 percent. The Coeur d'Alene Tribe owns about 14 percent of the forestland, and the remaining 8 percent is managed by the State Parks and Recreation and the Department of Lands, under the jurisdiction of the State of Idaho. The survey area has very limited Federal forestland.

Common conifer tree species in the survey area include ponderosa pine, Douglas-fir, lodgepole pine, western larch, grand fir, western redcedar, and western hemlock. Other species of lesser extent include western white pine, mountain hemlock, and Engelmann spruce. Cottonwood, quaking aspen, and birch are hardwood species commonly associated with areas of wet soils or with riparian areas.

Mullan Road, completed in 1860, opened northern Idaho to wagon travel. In 1882, the discovery of gold in nearby Silver Valley resulted in increased migration of white settlers to the area. As the new century began, many stands of virgin timber were harvested and milled into timber for use in building homes and farms to support the increasing population and industrial development of the area.

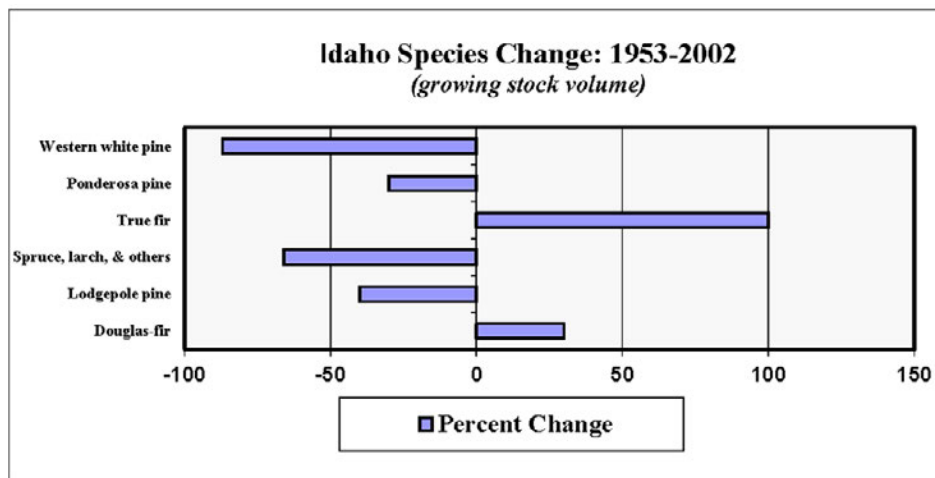
The forestland in the survey area is some of the most productive in Idaho. For well over a century, it supported a viable forest products and logging industry for the local economy. The forest products industry fluctuates based on demand, commonly reflecting the condition of the national economy. Lumber, plywood and veneer, cedar materials, and pulp and paper manufacturing are currently produced in the county. Small-diameter logs make up more of the forest harvest than they did in the early part of the last century.

Harvest activities can significantly change the composition and characteristics of a stand, altering the vegetation and trajectory of development. Most of the forestland in the survey area has been subject to several harvests over the last 100 years, resulting in a loss of health, vigor, and resilience of many stands. Timber harvest and silvicultural management techniques have dramatically improved in recent years, benefiting the health of local forestland.

Early in the 20th century, large destructive wildfires in the United States helped to focus public attention on forest fires. The most famous local one was the fire of 1910, which had a slight impact on forests in the survey area but was very extensive and destructive in the area to the east. Other large fires occurred in the United States during the same time period, and the nation became concerned about a "timber famine." Because of the loss of timber and human lives and the destruction of cities and other property by fires, a national policy of complete control of wildfires was adopted.

The long period of successful fire suppression and the impact of earlier logging have changed the local forests. Forest fuel levels have increased, and there is a corresponding increase in the risk of catastrophic fires in areas where nonlethal understory burns were common. The composition of tree species has shifted throughout the area. In general, the relative proportion of the more valuable tree species such as ponderosa pine, western white pine, and western larch has decreased and the proportion of Douglas-fir and grand fir has increased.

The following table illustrates the relative change in the extent of common conifers in Idaho as a result of the exclusion of harvesting and fire. Much of the impact became evident about the middle of the 20th century.



Present-day western forests are different in extent, composition, and condition as compared to forests during the Pre-European era. Ecologists define Pre-European as the time when natural forces were the primary architects of the forests, although Native Americans routinely burned forestland. Pre-European time serves as a reference that is useful in understanding and explaining the natural ecologic function of western forests. This era came to a close a little more than a century ago, when European immigrants arrived and dramatically altered the landscape.

Forest stands and other associated plants are in a constant state of change. Barring disruptions, forests follow a generally predictable process of plant succession that results in different expressions of forest vegetation with unique characteristics over time. In theory, this process of undisturbed forward change results in a final stable vegetative state referred to as the "climax vegetative stage." In reality, forest ecosystems are constantly being altered by disturbances such as fires, insects, and diseases, which halt and reset the process of succession. Changes resulting from disturbances can occur over a long period of time, or they can occur very quickly. The trajectory of vegetative change and the response to disturbance are restricted by basic site parameters that combine to produce logical expressions of plant communities.

Fire served as the primary agent of change in most western Pre-European forests. Wildfires occur instantaneously, and the magnitude of the disturbance can be large. The indigenous forests were adapted to and dependent on natural fire disturbances to renew young forests and to maintain healthy, sustainable forests. Forests and tree species respond to fires differently, and the impact depends on the type of forest. Unique forest types (historic climax plant communities) developed in response to climate, disturbances, underlying soils, and geological constraints along with physiographic influences such as slope and aspect. In general, the warm, dry forests

evolved with a natural adaptation to frequent, low-intensity wildfires and the cold, wet forests evolved with an adaptation to fires with a long return interval that typically burned with greater severity.

Tree species and the associated forest vegetation are adapted to the fire regimes under which they grow. Ponderosa pine can withstand low-intensity, fast-moving ground fires because of its thick bark structure. Douglas-fir and western larch also acquire this defense mechanism as they mature. Ponderosa pine and larch regenerate easily in burned areas where the mineral soil has been exposed. Plant competition is reduced for a time, exposing these species to ample sunlight and benefiting stand establishment. Western white pine has the ability to re-establish in the patchy burned areas that result from a mixed severity fire. Lodgepole pine has serotinous (glued) cones that open to release seed following a hot, fast-moving fire that kills the tree but does not destroy the cones on the branches.

Forestland Productivity and Management

Forestland Productivity

Forest productivity depends on the proper function of many interdependent soil and environmental factors. Soil quality can be preserved by applying conservation measures during harvest and management activities.

The favorable influence of volcanic ash on forested soils is significant. Ash increases the available water holding capacity of the upper part of the soil profile, which is important during the hottest and driest part of summer. This improves the germination and establishment of conifer seedlings and enables the site to support a richer variety of understory plants. Ash and organic debris provide a favorable environment for soil microbial populations, which benefit nutrient cycling, forest productivity, and soil health.

The nutrient status and availability of a forested soil is influenced primarily by the parent material and ash and by past management. Some types of rock, especially basalt, tend to have inherently better nutrient capabilities. Soils derived from certain metamorphic and sedimentary rock generally are less fertile. Trees that grow on a site and their expected growth vary by soil type. The depth, chemistry, texture, and available water holding capacity of a soil in combination with aspect, elevation, and precipitation are major factors that determine the occurrence of tree species and the potential growth and stocking rate.

Ten major tree species are in Northern Idaho, most of which are in the survey area. Each species has tolerances and responses to site and stand conditions. The tolerances are listed below along with the tree species. The species are listed in sequence from the species having the highest tolerance to those that have the lowest tolerance. For example, western hemlock has a high tolerance to shade and western larch has a low tolerance to shade. This relative ranking of the tree species to the five tolerances is adapted from "Autecology and Synecology of Western Larch" by Carl E. Fiedler and Dennis A. Lloyd, a paper presented at the 1992 International Symposium on Ecology and Management of Larix Forests: A Look Ahead.

Shade tolerance.—Western hemlock, western redcedar, subalpine fir, grand fir, Engelmann spruce, Douglas-fir, western white pine, ponderosa pine, lodgepole pine, western larch

Frost tolerance.—Lodgepole pine, Engelmann spruce, subalpine fir, western white pine, Douglas-fir, western larch, ponderosa pine, grand fir, western redcedar, western hemlock

Drought tolerance.—Ponderosa pine, Douglas-fir, lodgepole pine, western larch, grand fir, western white pine, Engelmann spruce, subalpine fir, western redcedar, western hemlock

Fire resistance tolerance.—Western larch, ponderosa pine, Douglas-fir, western white pine, grand fir, lodgepole pine, western redcedar, Engelmann spruce, subalpine fir, western hemlock

Excess water tolerance.—Lodgepole pine, western redcedar, Engelmann spruce, western hemlock, subalpine fir, western white pine, grand fir, western larch, Douglas-fir, ponderosa pine

Forest managers should strive to preserve or improve ecologic function, resilience, and sustainability of the forests by understanding the natural factors and site parameters of native forests. Managers commonly blend ecologically sound management practices with current forest management objectives. For example, trees can be harvested on a shorter rotation period in a well managed forest as compared to an unmanaged forest, but the specific tree species best adapted to a site is the same. Many of the forests in the survey area are managed for wildlife, water and grazing uses, and social value in addition to timber production.

In [table 13](#), the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years (*site index base age*). The site index applies to fully stocked, even-aged, unmanaged stands. A site index value for a tree species is derived from a site curve table. Each species has a unique site curve table. The tables used for determining the site index of a given species are identified in the “References” section. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

Many of the stands in the survey area have been consistently well managed or have been restored and managed to an improved condition; however, the majority of the local forestland is still in a degraded condition to some degree. In general, healthy forests consist of healthy trees that are best adapted to the site.

Each of the forested soils in the survey area has been assigned to a habitat type. The habitat types are described in the publication “Forest Habitat Types of Northern Idaho: A Second Approximation” (Cooper and others, 1991). Habitat types provide for stratification of the soils based on plant association and provide a foundational understanding of the environmental parameters of the soil. Habitat types are widely used by forest managers to develop a variety of management guidelines. Forest researchers also use this system extensively. The habitat type for each forested soil in the survey area is given in [table 12](#).

Common forest resource problems are a result of the shift in species composition, commonly coupled with overstocking. These issues include root disease, damaging outbreaks of insects and diseases, and increased fuel loading, which elevates the risk of destructive wildfires. Damage to soil quality can be serious and can permanently reduce the ecologic function of a site.

There are many naturally occurring damaging agents, and they generally are more destructive if a forest is in poor condition. Mistletoe and bark beetles, such as the Douglas-fir beetle, mountain pine beetle, and fir engraver beetle, commonly result

in loss of production or mortality of trees in forest stands. The tussock moth attacks Douglas-fir and grand fir during cyclic outbreaks. Root diseases are increasing because the abundance of the most susceptible tree species, grand fir and Douglas-fir, has been increasing disproportionately for years.

Local forests suffer from the post-European introduction of exotic pests. An example is the loss of naturally occurring, fully viable western white pine stands following the introduction of white pine blister rust in the United States around 1930. Other introduced weeds and pests impact the health and function of forest understory plant communities.

In tables 14 through 18, interpretive ratings are given for various aspects of forestland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for fire damage and seedling mortality are expressed as *low*, *moderate*, and *high*. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The ratings in the column *limitations affecting construction of haul roads and log landings*, are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

Ratings in the column *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forest equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the

soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erosion factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erosion factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a low, moderate, or high potential for this kind of damage. The ratings indicate an evaluation of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water

capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Recreational Development

In [tables 19 and 20](#), the soils of the survey area are rated according to limitations that affect their suitability for recreational development. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in these tables can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic

areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

By Frank Fink, biologist, Natural Resources Conservation Service, and Gerald Green, wildlife mitigation biologist, Coeur d'Alene Tribe.

The survey area supports a variety of game and nongame fish and wildlife species that are migratory or resident. The habitat provides breeding, rearing, roosting, feeding, and winter cover areas, depending on the species. Large streams, such as the St. Joe River, and smaller tributary streams provide habitat for native westslope cutthroat trout and bull trout and non-native brook and rainbow trout. Upland terrestrial species inhabit the diverse cropland, pastureland, and forestland throughout the survey area. Cropland that includes patches of woodland and shrubs is the major habitat type along the western half of the survey area. General soil map units 5, 7, 8, and 9 are associated with these cropland areas. They commonly are referred to as cutover timber areas. Forestland with harvestable timber and grazeable forestland are more prevalent in the eastern part of the survey area. General soil map units 1, 2, 3, 4, 6, and 10 are associated with harvestable forestland, pastureland, and grazeable forestland. The elevation changes in the survey area contribute to the diversity of wildlife in the area.

Large ungulates in the area include elk, moose, mule deer, and white-tailed deer. Elk are well suited to the area. They frequently forage in the meadows and wetlands and use the forested areas for cover. Elk migrate to winter range on south- and west-facing slopes below an elevation of 4,000 feet, along major river valleys. General soil map units 2, 4, 5, 7, 8 and 9 are associated with these wintering areas. Moose are more closely associated with riparian areas at the lower elevations, along streams and lakes. General soil map units 3, 5, 7, 8 and 10 are associated with these habitat areas.

Deer in the survey area include white-tailed deer and mule deer. White-tailed deer are more numerous than mule deer. White-tailed deer generally are at the lower elevations, along the river systems and in valleys, in areas of cropland, pastureland, and riparian forestland. General soil map units 3, 5, 7, 8 and 10 are associated with these areas. Mule deer generally are at the higher elevations, near prominent ridgelines.

Carnivorous mammals in the survey area include black bear, mountain lion, coyote, and bobcat, generally on the forested foothills and mountains. Other mammal species throughout the survey area include beaver, badger, porcupine, raccoon, and cottontail. Snowshoe hare are at the higher elevations on mountains. Low densities of beaver and muskrat are along the streams. Western pond turtle and river otter have been observed in lakes along the St. Joe River. General soil map unit 10 is associated with these areas.

A variety of avian species are associated with the different types of habitat in the areas of cropland and wetland, in streams, and on mountains. Birds in the areas of wetland include a variety of ducks such as mallard, redhead, pintail, and teal; osprey; double-breasted cormorant; and coot. The St. Joe River floodplain is used by tundra swans during migration, and white pelican and great blue heron have been observed along the river. These birds typically are associated with general soil map units 9 and 10.

Avian species in forested areas include western tanager, Northern flicker, black-capped chickadee, gray jay, pileated woodpecker, and wild turkey. Ruffed grouse, blue grouse, and spruce grouse are in areas that are dominantly forestland. Blue grouse and spruce grouse may formerly have been abundant in the area; however, current sightings of these species are rare. Ruffed grouse summer in open clearings in areas of forestland and winter in conifers.

Some of the more common and highly visible raptors in the area are the bald eagle, red-tailed hawk, goshawk, osprey, and several species of owls. Bald eagles winter along large river systems and adjacent lakes and feed on carrion in the uplands.

Westslope cutthroat trout and rainbow trout are the main coldwater gamefish in the large rivers and tributaries. Small tributary streams contain significant spawning and rearing habitat for native cutthroat trout. Warmwater fish in the St. Joe River include northern pike and smallmouth bass. Warmwater fisheries are confined to the lower St. Joe River and adjacent side-channel lakes.

Plant and animal species of special concern in the survey area include the bull trout, Canada lynx, grey wolf, and yellow-billed cuckoo. Bull trout use the St. Joe River to migrate between lower river rearing areas and spawning areas in the higher elevation tributary streams. Canada lynx may have inhabited the high mountainous areas in the past, but there have not been any recent sightings. Grey wolf have been sighted recently in the lower St. Joe River watershed. Yellow-billed cuckoo prefer areas of open forestland. Historically, the survey area was dominantly forestland; therefore, suitable habitat for the yellow-billed cuckoo is assumed to be in the area.

Wildlife populations are typically determined by the amount and suitability of the habitat, which includes the supply of food, the amount of cover, and the availability of water. Habitat differs in its capacity to provide these essential needs. Soils are the basis for the kind and amount of vegetation that is available as habitat, such as food and cover. Wildlife habitat can be created or enhanced by planting appropriate vegetation or by promoting the natural establishment of native plant communities.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, saturated hydraulic conductivity (Ksat), corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, reclamation material, roadfill, and topsoil; plan structures for water management; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. [Tables 21 and 22](#) show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable

for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the

amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 23 and 24 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, daily cover for landfill, and sanitary landfills. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches or between a depth of 24 inches and a restrictive layer is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Saturated hydraulic conductivity (Ksat) is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include saturated hydraulic conductivity (Ksat), depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The

surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If the downward movement of water through the soil profile is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Construction Materials

Tables 25 and 26 give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 25, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The soils are rated *good*, *fair*, or *poor* as potential sources of topsoil. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

In table 26, the soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material and roadfill. The features that limit the soils as a source of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, and topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Water Management

Table 27 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas and embankments, dikes, and levees. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the saturated hydraulic conductivity (Ksat) of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against

overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of 5 or 6 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory testing of some soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Soil Properties

[Table 28](#) gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages

are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Soil Properties

Table 29 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller. Only the estimated percentage of clay is given in the table.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (K_{sat}), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $1/3$ - or $1/10$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ability of a soil to transmit water or air. The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. The values of K and T are calculated based on the soil properties provided in the database and the criteria for the factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook," which

is available in local offices of the Natural Resources Conservation Service or on the Internet.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 30 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity (CEC) is the total amount of exchangeable cations that can be held by the soil, expressed in terms of centimoles per kilogram. It commonly is measured at neutral pH of 7.0 (CEC-7), but it may be measured at some other stated pH value. Soils that have a low CEC hold fewer cations and may require more frequent applications of fertilizer than those that have a high CEC. The ability to retain cations minimizes the risk of ground-water pollution.

Effective cation-exchange capacity (ECEC) refers to the sum of exchangeable cations plus aluminum, expressed in terms of centimoles per kilogram. It is determined for soils that have natural pH of less than or equal to 5.5 and is a measure of the CEC at the natural pH. In soils with low pH, the ECEC more accurately reflects the actual CEC of the soils. Although CEC-7 is not actually present in these soils under natural conditions, the ECEC reflects the potential CEC if the soils are limed and the pH increased to neutral.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

[Table 31](#) gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual

weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 32 gives estimates of various soil features. The estimates are used in land use planning.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

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For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2010). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Mollisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Xeroll (*Xer*, meaning dry, plus *oll*, from Mollisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Argixerolls (*Argi*, meaning clay translocation, plus *xeroll*, the suborder of the Mollisols that has a xeric moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Argixerolls.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, mesic Typic Argixerolls.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Table 33 indicates the order, suborder, great group, subgroup, and family of the taxonomic units in the survey area.

Taxonomic Units and Their Morphology

In this section, each taxonomic unit recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each unit. A pedon, a small three-dimensional area of soil, that is typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993) and in the "Field Book for Describing and Sampling Soils" (Schoeneberger and others, 2002). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 2010). Unless otherwise indicated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series.

Agatha Series

Depth class: Deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Structural benches, canyons, escarpments

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 5 to 65 percent

Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 110 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxeralfs

Typical Pedon

Agatha gravelly ashy silt loam, 35 to 65 percent slopes, stony, west of St. Maries, Idaho; about 225 feet north and 1,750 feet east of the southwest corner of section 21, T. 46 N., R. 2 W.; latitude 47 degrees, 18 minutes, 45 seconds north and longitude 116 degrees, 36 minutes, 3 seconds west, NAD 83; UTM 530170 meters east, 5239969 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 7 inches; dark grayish brown (10YR 4/2) gravelly ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and few medium tubular pores; 20 percent gravel; slightly acid (pH 6.3); clear wavy boundary.

BA—7 to 11 inches; brown (10YR 5/3) gravelly ashy silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure parting to weak very fine and fine angular blocky; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 20 percent gravel; slightly acid (pH 6.5); gradual wavy boundary.

Bt1—11 to 20 inches; brown (10YR 5/3) very gravelly silt loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium angular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores;

5 percent patchy faint clay films in pores; 30 percent gravel and 5 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

Bt2—20 to 32 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 3/4) moist; moderate medium and coarse angular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 35 percent patchy distinct brown (7.5YR 4/4) clay films on faces of peds and in pores; 5 percent discontinuous distinct silt coatings on vertical faces of peds; 30 percent gravel and 5 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

Bt3—32 to 38 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; moderate fine and medium angular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 10 percent patchy prominent dark brown (7.5YR 3/4) and brown (7.5YR 4/4) clay films on faces of peds and in pores; 10 percent gravel and 35 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

Bt4—38 to 43 inches; yellowish brown (10YR 5/4) extremely cobbly clay loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium angular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 30 percent patchy distinct dark brown (7.5YR 3/4) and brown (7.5YR 4/4) clay films on faces of peds and in pores; 10 percent gravel, 50 percent cobbles, and 5 percent stones; slightly acid (pH 6.5); abrupt wavy boundary.

R—43 to 53 inches; indurated basalt; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 40 to 60 inches

Ahrs Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from quartzite

Slope range: 5 to 75 percent

Elevation: 2,820 to 4,860 feet

Mean annual precipitation: 30 to 42 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Ashy-skeletal over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands

Typical Pedon

Ahrs gravelly ashy silt loam, 35 to 75 percent slopes, southwest of St. Maries, Idaho; about 430 feet north and 1,670 feet west of the southeast corner of section 32, T. 46 N., R. 2 W.; latitude 47 degrees, 17 minutes, 1 second north and longitude 116 degrees, 36 minutes, 52 seconds west, NAD 83; UTM 529157 meters east, 5236754 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 6 inches; dark grayish brown (10YR 4/2) gravelly ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; 20 percent gravel; slightly acid (pH 6.5); abrupt wavy boundary.

Bw1—6 to 14 inches; yellowish brown (10YR 5/4) very gravelly ashy silt loam, dark yellowish brown (10YR 3/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 30 percent gravel and 5 percent cobbles; slightly acid (pH 6.5); clear wavy boundary.

Bw2—14 to 23 inches; very pale brown (10YR 7/4) very gravelly ashy silt loam, yellowish brown (10YR 5/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and common medium tubular pores; 35 percent gravel, 5 percent cobbles, and 5 percent flagstones; slightly acid (pH 6.5); abrupt wavy boundary.

2BC—23 to 30 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular pores; 25 percent gravel, 15 percent cobbles, and 10 percent flagstones; slightly acid (pH 6.5); gradual wavy boundary.

2C1—30 to 41 inches; pale brown (10YR 6/3) extremely cobbly loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular pores; 25 percent gravel, 40 percent cobbles, and 5 percent flagstones; slightly acid (pH 6.2); clear wavy boundary.

2C2—41 to 51 inches; very pale brown (10YR 7/4) extremely cobbly silt loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular pores; 20 percent gravel, 60 percent cobbles, and 5 percent flagstones; moderately acid (pH 5.9); gradual wavy boundary.

2C3—51 to 60 inches; very pale brown (10YR 7/3) extremely cobbly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and few medium tubular and irregular pores; 35 percent gravel, 35 percent cobbles, and 5 percent flagstones; slightly acid (pH 6.2).

Range in Characteristics

Thickness of ash mantle: 14 to 24 inches

Depth to strongly contrasting textural stratification (2C horizon): 23 to 41 inches

Aquandic Endoaquepts

Depth class: Very deep

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills, mountains

Landform: Flood plains, stream terraces

Parent material: Mixed alluvium

Slope range: 0 to 2 percent

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Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Aquandic Endoaquepts

Typical Pedon

Aquandic Endoaquepts ashy silt loam in an area of Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes, about 4.5 miles southeast of Benewah, Idaho; about 500 feet south and 1,950 feet west of the northeast corner of section 9, T. 44 N., R. 3 W.; latitude 47 degrees, 10 minutes, 48.15 seconds north and longitude 116 degrees, 43 minutes, 12.90 seconds west, NAD 83; UTM 521196 meters east, 5225209 meters north, zone 11.

- A—0 to 6 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine tubular and common medium irregular pores; 2 percent fine prominent strong brown (7.5YR 4/6) oxidized iron masses; moderately acid (pH 6.0); clear wavy boundary.
- AB—6 to 11 inches; light brownish gray (10YR 6/2) ashy silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to moderate coarse granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular and common medium irregular pores; 5 percent fine prominent strong brown (7.5YR 4/6) oxidized iron masses; strongly acid (pH 5.5); clear wavy boundary.
- Bw1—11 to 21 inches; gray (10YR 6/1) silt loam, dark grayish brown (10YR 4/2) moist; weak thick platy structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine and fine tubular and few medium irregular pores; 1 percent fine distinct black (10YR 2/1) iron-manganese masses, 10 percent fine prominent strong brown (7.5YR 4/6) oxidized iron masses, and 1 percent fine faint light gray (10YR 7/1) iron depletions; moderately acid (pH 6.0); gradual wavy boundary.
- Bw2—21 to 40 inches; gray (10YR 6/1) silt loam, dark gray (10YR 4/1) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine tubular and few medium irregular pores; 1 percent fine distinct black (10YR 2/1) iron-manganese masses, 10 percent fine prominent strong brown (7.5YR 4/6) oxidized iron masses, and 1 percent fine faint light gray (10YR 7/1) iron depletions; strongly acid (pH 5.5); gradual wavy boundary.
- 2C1—40 to 45 inches; light gray (10YR 7/1) silt loam, gray (10YR 5/1) moist; massive; moderately hard, friable, slightly sticky and nonplastic; common very fine, fine, and medium roots; common very fine and fine tubular and few medium irregular pores; 1 percent fine prominent black (10YR 2/1) iron-manganese masses, 10 percent fine prominent brown (7.5YR 4/4) oxidized iron masses, and 1 percent fine faint light gray (10YR 7/1) iron depletions; 5 percent gravel; slightly acid (pH 6.5); clear wavy boundary.
- 2C2—45 to 60 inches; light gray (10YR 7/1) and gray (10YR 6/1) extremely gravelly loam, gray (10YR 5/1) and dark gray (10YR 4/1) moist; massive; moderately hard, friable, nonsticky and nonplastic; common very fine and fine tubular and few medium irregular pores; 10 percent fine prominent strong brown (7.5YR 4/6) oxidized iron masses and 1 percent fine faint light gray (10YR 7/1) iron depletions; 60 percent gravel and 10 percent cobbles; slightly acid (pH 6.3).

Range in Characteristics

Depth to highest seasonal water table: 5 to 20 inches in February through April

Flooding: Frequent, brief periods in February through May

Depth to strongly contrasting textural stratification (2C horizon): 30 to 48 inches

Aquic Udifluvents

Depth class: Very deep

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills, mountains, river valleys

Landform: Flood plains, stream terraces

Parent material: Mixed alluvium

Slope range: 0 to 4 percent

Elevation: 2,150 to 3,000 feet

Mean annual precipitation: 26 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Aquic Udifluvents

Typical Pedon

Aquic Udifluvents silt loam in an area of Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes ([fig. 12](#)), about 5.5 miles west of St. Maries, Idaho; about 550 feet south and 2,100 feet west of the northeast corner of section 27,



Figure 12.—Typical profile of Aquic Udifluvents silt loam in an area of Aquic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes.

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T. 46 N., R. 3 W.; latitude 47 degrees, 18 minutes, 36 seconds north and longitude 116 degrees, 42 minutes, 5 seconds west, NAD 83; UTM 522576 meters east, 5239657 meters north, zone 11.

- A—0 to 8 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine and common medium tubular pores and common coarse irregular pores; 2 percent fine gravel; slightly acid (pH 6.5); clear wavy boundary.
- Bw—8 to 22 inches; pale brown (10YR 6/3) gravelly silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine and common medium tubular pores and common coarse irregular pores; 15 percent fine gravel; slightly acid (pH 6.3); abrupt wavy boundary.
- 2C—22 to 60 inches; variegated extremely cobbly loamy coarse sand; single grain; loose, nonsticky and nonplastic; common very fine, fine, and medium roots; many medium, coarse, and very coarse irregular pores; 1 percent fine distinct iron-manganese masses lining pores and around rock fragments and 1 percent fine faint iron depletions; 45 percent gravel and 45 percent cobbles; moderately acid (pH 6.0).

Range in Characteristics

Depth to highest seasonal water table: 20 to 35 inches in February through May

Depth to highest seasonal water table (protected areas): 20 to 40 inches in February through May

Flooding: Occasional, brief periods in February through May

Flooding (protected areas): Occasional, brief periods in February through June

Depth to strongly contrasting textural stratification (2C horizon): 22 to 30 inches

Ardenvoir Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 5 to 65 percent

Elevation: 2,190 to 4,710 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 50 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts

Typical Pedon

Ardenvoir gravelly ashy silt loam in an area of Huckle-Ardenvoir association, 15 to 35 percent slopes, east of McCroskey State Park and King Valley; about 740 feet south and 220 feet west of the northeast corner of section 2, T. 43 N., R. 5 W.; latitude 47 degrees, 6 minutes, 13 seconds north and longitude 116 degrees, 55 minutes, 6 seconds west, NAD 83; UTM 506197 meters east, 5216681 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 6 inches; brown (10YR 5/3) gravelly ashy silt loam, dark yellowish brown (10YR 3/4) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many fine and medium and few coarse roots; many fine irregular pores; 20 percent gravel; neutral (pH 6.6); clear wavy boundary.

Bw1—6 to 11 inches; light yellowish brown (10YR 6/4) gravelly ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine, medium, and coarse roots; many very fine and fine tubular pores; 20 percent gravel; slightly acid (pH 6.4); gradual wavy boundary.

Bw2—11 to 19 inches; very pale brown (10YR 7/4) gravelly loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few fine, medium, and coarse roots; many very fine and fine tubular pores; 20 percent gravel; slightly acid (pH 6.2); gradual wavy boundary.

C1—19 to 39 inches; very pale brown (10YR 7/4) very cobbly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine, medium, and coarse roots; common very fine and fine tubular and irregular pores; 15 percent gravel and 25 percent cobbles; moderately acid (pH 5.6); gradual wavy boundary.

C2—39 to 48 inches; very pale brown (10YR 7/3) extremely cobbly loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium roots; few very fine and fine tubular pores; 25 percent gravel, 45 percent cobbles, and 5 percent flagstones; moderately acid (pH 6.0); gradual wavy boundary.

Cr—48 to 60 inches; moderately cemented metasedimentary rock; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Depth to strongly contrasting textural stratification (2C horizon) in Ardenvoir soils, dry, of map units 613, 614, 703, and 782: 10 to 20 inches

Arson Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains, foothills

Landform: Hills, mountain slopes

Parent material: Volcanic ash and loess over residuum derived from siltstone

Slope range: 8 to 60 percent

Elevation: 2,250 to 3,720 feet

Mean annual precipitation: 23 to 37 inches

Mean annual air temperature: 42 to 49 degrees F

Frost-free period: 90 to 130 days

Taxonomic class: Fine-loamy, mixed, superactive, frigid Vitrandic Haploxeralfs

Typical Pedon

Arson ashy silt loam in an area of Arson-Lotuspoint complex, 10 to 40 percent slopes, about 5.5 miles northwest of St. Maries, Idaho; about 870 feet north and 2,480 feet west of the southeast corner of section 29, T. 47 N., R. 2 W.; latitude

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47 degrees, 23 minutes, 17.50 seconds north and longitude 116 degrees, 37 minutes, 4.40 seconds west, NAD 83; UTM 528839 meters east, 5248375 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 5 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark brown (10YR 2/2) moist; moderate very fine and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 2 percent gravel; slightly acid (pH 6.2); clear smooth boundary.

BA—5 to 9 inches; brown (10YR 5/3) ashy silt loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium and coarse tubular pores; 2 percent gravel; slightly acid (pH 6.2); clear smooth boundary.

EBt—9 to 15 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; moderate medium and coarse angular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 5 percent faint clay films on faces of peds and in pores; 3 percent gravel; moderately acid (pH 6.0); gradual wavy boundary.

Bt1—15 to 27 inches; yellowish brown (10YR 5/4) and light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse prismatic structure parting to moderate medium angular blocky; hard, firm, slightly sticky and slightly plastic; few very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 30 percent distinct brown (7.5YR 4/4 and 5/4) clay films on faces of peds and in pores; 5 percent distinct silt coatings on faces of peds and in pores; 5 percent gravel and 2 percent paragravel; moderately acid (pH 5.9); gradual wavy boundary.

Bt2—27 to 38 inches; yellowish brown (10YR 5/4) and light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse and very coarse prismatic structure parting to moderate medium and coarse angular blocky structure; hard, firm, moderately sticky and slightly plastic; few fine and medium roots; many very fine and fine, common medium, and few coarse tubular pores; 25 percent distinct brown (7.5YR 4/4 and 5/4) clay films on faces of peds and in pores; 5 percent distinct silt coatings on faces of peds and in pores; 5 percent gravel and 2 percent paragravel; strongly acid (pH 5.5); clear wavy boundary.

2Bt3—38 to 43 inches; yellowish brown (10YR 5/4) extremely gravelly silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few fine roots; common very fine and few medium interstitial pores and common fine and few coarse tubular pores; 50 percent distinct brown (7.5YR 5/4) and light brown (7.5YR 6/4) clay films on faces of peds, in pores, and on rock fragments; 5 percent distinct silt coatings on faces of peds and in pores; 45 percent gravel, 10 percent paragravel, and 10 percent cobbles; strongly acid (pH 5.5); gradual wavy boundary.

2BCt—43 to 57 inches; light yellowish brown (10YR 6/4) very gravelly silt loam, yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few fine roots; common very fine and few medium interstitial pores and common fine and few coarse tubular pores; 50 percent distinct brown (7.5YR 5/4) and light brown (7.5YR 6/4) clay films on rock fragments; 10 percent distinct silt coatings on faces of peds; 35 percent gravel, 10 percent paragravel, and 5 percent cobbles; strongly acid (pH 5.3); clear irregular boundary.

2Crt—57 to 67 inches; weakly cemented metasedimentary rock; fractured at 4- to 18-inch intervals; common distinct and prominent clay films on rock fragments and between metasedimentary planes.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Bechtel Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills

Landform: Hills

Parent material: Volcanic ash and loess over residuum derived from metasedimentary rock

Slope range: 20 to 40 percent

Elevation: 2,510 to 3,660 feet

Mean annual precipitation: 30 to 33 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Taxonomic class: Fine-loamy, mixed, superactive, frigid Vitrandic Hapludalfs

Typical Pedon

Bechtel ashy silt loam in an area of Bechtel-Reggear complex, 15 to 40 percent slopes, about 6 miles southeast of Plummer, Idaho; about 2,210 feet south and 250 feet east of the northwest corner of section 31, T. 46 N., R. 3 W.; latitude 47 degrees, 17 minutes, 28 seconds north and longitude 116 degrees, 45 minutes, 58 seconds west, NAD 83; UTM 517683 meters east, 5237318 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; grayish brown (10YR 5/2) and light brownish gray (10YR 6/2) ashy silt loam, very dark grayish brown (10YR 3/2) and dark brownish gray (10YR 4/2) moist; weak fine and medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 10 percent gravel; slightly acid (pH 6.5); clear smooth boundary.

BA—4 to 9 inches; light brownish gray (10YR 6/2) ashy silt loam, dark grayish brown (10YR 4/2) moist; moderate fine subangular blocky structure parting to weak medium granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 7 percent gravel; slightly acid (pH 6.5); clear smooth boundary.

Bt1—9 to 17 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; moderate medium and coarse subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; few very fine, fine, medium, and coarse roots; many very fine and fine and common medium tubular pores; 20 percent faint and distinct clay films on faces of peds and in pores; 10 percent faint skeletons in pores; 5 percent gravel and 2 percent paragravel; slightly acid (pH 6.3); gradual wavy boundary.

Bt2—17 to 26 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) and yellowish brown (10YR 5/4) moist; moderate medium and very coarse subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; few very

fine, fine, medium, and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 45 percent prominent brown (7.5YR 4/4 and 5/4) and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 35 percent faint very pale brown (10YR 8/2 and 8/3) skeletons on faces of peds and in pores; 5 percent gravel and 2 percent paragravel; moderately acid (pH 6.0); clear wavy boundary.

Bt3—26 to 35 inches; very pale brown (10YR 7/3) very gravelly loam, brown (10YR 5/3) and yellowish brown (10YR 5/4) moist; moderate medium and coarse subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; few very fine, fine, medium, and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 20 percent prominent brown (7.5YR 4/4 and 5/4) and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 20 percent faint and distinct skeletons in pores and on rock fragments; 45 percent gravel and 10 percent paragravel; moderately acid (pH 6.0); clear wavy boundary.

Bct—35 to 56 inches; very pale brown (10YR 7/3 and 8/3) extremely gravelly loam, brown (10YR 5/3) and pale brown (10YR 6/3) moist; massive; hard, very firm, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and common medium and coarse tubular pores; 20 percent prominent strong brown (7.5YR 5/6) and reddish brown (5YR 4/4) clay films on rock fragments; 20 percent faint and distinct skeletons on rock fragments; 75 percent gravel and 10 percent paragravel; strongly acid (pH 5.2); abrupt irregular boundary.

Cr—56 to 66 inches; moderately cemented metasedimentary rock; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Bellslake Series

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Depressions, flood plains

Parent material: Volcanic ash over silty alluvium over herbaceous organic material

Slope range: 0 to 1 percent

Elevation: 2,120 to 2,140 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Coarse-silty, mixed, superactive, nonacid, frigid Aquandic Humaquepts

Typical Pedon

Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes, about 5 miles northwest of St. Maries, Idaho; about 1,400 feet south and 300 feet west of the northeast corner of section 2, T. 46 N., R. 3 W.; latitude 47 degrees, 21 minutes, 52.60 seconds north and longitude 116 degrees, 40 minutes, 21.50 seconds west, NAD 83; UTM 524719 meters east, 5245736 meters north, zone 11.

Ap—0 to 5 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) and very dark brown (10YR 2/2) moist; weak fine and medium granular structure; slightly hard, very friable, nonsticky and slightly plastic; many very fine

- and fine and common medium roots; many very fine and fine and few medium tubular pores; strongly acid (pH 5.1); clear wavy boundary.
- Ag—5 to 11 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine and few medium tubular pores; strongly acid (pH 5.1); clear wavy boundary.
- Bgb1—11 to 23 inches; gray (10YR 6/1) and light brownish gray (10YR 6/2) silt loam, very dark grayish brown (10YR 3/2) and dark grayish brown (10YR 4/2) moist; weak thick platy structure parting to weak very coarse subangular blocky; hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 20 percent very fine and fine dark yellowish brown (10YR 4/6) masses of oxidized iron; 1 percent faint organic stains; strongly acid (pH 5.2); gradual irregular boundary.
- Bgb2—23 to 32 inches; light gray (10YR 7/2) and light brownish gray (10YR 6/2) silt loam, grayish brown (10YR 5/2) and dark grayish brown (10YR 4/2) moist; weak thick platy structure parting to weak very coarse subangular blocky; hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine and common medium tubular pores; 2 percent very fine and fine distinct dark yellowish brown (10YR 4/6) masses of oxidized iron and 1 percent very fine distinct manganese masses; 1 percent distinct organic stains; strongly acid (pH 5.2); gradual irregular boundary.
- Agb—32 to 40 inches; grayish brown (10YR 5/2) and light brownish gray (10YR 6/2) silt loam, very dark grayish brown (10YR 3/2) and dark grayish brown (10YR 4/2) moist; weak thick platy structure; hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine and common medium tubular pores; 20 percent very fine and fine distinct dark yellowish brown (10YR 4/6) masses of oxidized iron and 1 percent very fine distinct manganese masses; 1 percent distinct organic stains; strongly acid (pH 5.1); clear wavy boundary.
- Oa/Agb—40 to 47 inches; very dark grayish brown (10YR 3/2) and very dark brown (10YR 2/2) muck, black (10YR 2/1) moist (Oa part); grayish brown (10YR 5/2) mucky silt loam, very dark grayish brown (10YR 3/2) moist (Agb part); about 3 percent fiber, 1 percent rubbed; massive; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few medium tubular and irregular pores; 20 percent fine prominent brown (7.5YR 4/4) and strong brown (7.5YR 4/6) masses of oxidized iron; strongly acid (pH 5.1); gradual wavy boundary.
- Oa1—47 to 55 inches; very dark grayish brown (10YR 3/2) and very dark brown (10YR 2/2) muck, black (10YR 2/1) moist; about 15 percent fiber, 3 percent rubbed; massive; moderately hard, friable; common very fine and fine roots; many very fine and fine, common medium, and few coarse irregular pores; 10 percent fine and 1 percent medium distinct and prominent dark yellowish brown (10YR 4/6) and strong brown (7.5YR 4/6) masses of oxidized iron; strongly acid (pH 5.1); clear wavy boundary.
- Oa2—55 to 62 inches; very dark grayish brown (10YR 3/2) and very dark brown (10YR 2/2) muck, black (10YR 2/1) moist; about 10 percent fiber, 1 percent rubbed; massive; slightly hard, very friable; few very fine and fine roots; many very fine and fine, common medium, and few coarse irregular pores; 2 percent fine and medium distinct dark yellowish brown (10YR 4/6) masses of oxidized iron; strongly acid (pH 5.4).

Range in Characteristics

Depth to highest seasonal water table (protected, drained areas): At the surface to a depth of 12 inches in January through May

Flooding (protected, drained areas): Occasional, brief periods in December through June

Benewah Series

Depth class: Very deep ([fig. 13](#))

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills

Parent material: Volcanic ash and loess over alluvium

Slope range: 5 to 35 percent

Elevation: 2,700 to 3,300 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-silty, isotic, frigid Vitrandic Haploxeralfs



Figure 13.—Typical profile of Benewah ashy silt loam in an area of Benewah-Santa complex, 8 to 20 percent slopes. Numbers on tape indicate centimeters.

Typical Pedon

Benewah ashy silt loam in an area of Benewah-Rasser complex, 5 to 15 percent slopes, in Benewah Valley near the old school house; about 740 feet north and 540 feet east of the southwest corner of section 24, T. 45 N., R. 4 W.; latitude 47 degrees, 13 minutes, 23 seconds north and longitude 116 degrees, 47 minutes, 11 seconds west, NAD 83; UTM 516177 meters east, 5228122 meters north, zone 11.

Ap—0 to 6 inches; light brownish gray (10YR 6/2) ashy silt loam, dark brown (10YR 3/3) moist; weak fine and medium granular structure; hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; moderately acid (pH 6.0); abrupt wavy boundary.

BE—6 to 15 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and fine tubular pores; 5 percent fine prominent iron-manganese concretions; 1 percent cobbles; strongly acid (pH 5.5); clear wavy boundary.

E—15 to 18 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; moderate coarse subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and fine tubular pores; 5 percent fine prominent iron-manganese concretions; strongly acid (pH 5.1); abrupt wavy boundary.

Bt1—18 to 23 inches; pink (7.5YR 7/4) silty clay loam, brown (7.5YR 5/4) moist; moderate coarse prismatic structure; extremely hard, firm, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and fine tubular pores; 55 percent continuous faint and distinct clay films on faces of peds and in pores; 80 percent distinct and prominent silt coatings that are very pale brown (10YR 7/3) and pale yellow (2.5Y 7/3) when moist and are on faces of peds; 5 percent fine prominent iron-manganese concretions; 1 percent fine gravel; strongly acid (pH 5.4); clear wavy boundary.

Bt2—23 to 34 inches; pink (7.5YR 7/4) silty clay loam, dark reddish brown (5YR 3/4) moist; moderate coarse prismatic structure; extremely hard, very firm, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and fine tubular pores; continuous faint, distinct, and prominent clay films on faces of peds and in pores; 40 percent prominent silt coatings that are very pale brown (10YR 7/3) and pale yellow (2.5Y 7/3) when moist and are on faces of peds; 5 percent patchy prominent organic stains on faces of peds; 5 percent fine iron-manganese concretions; 1 percent fine gravel; moderately acid (pH 5.7); clear wavy boundary.

Bt3—34 to 60 inches; brown (7.5YR 5/4) silty clay loam, reddish brown (5YR 4/4) moist; moderate coarse prismatic structure; extremely hard, very firm, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and fine tubular pores; continuous faint, distinct, and prominent clay films on faces of peds and in pores; 5 percent fine and 1 percent medium iron-manganese concretions; very strongly acid (pH 4.5).

Range in Characteristics

Depth to highest seasonal water table: 15 to 24 inches in February through March

Blinn Series

Depth class: Moderately deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, escarpments, structural benches

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 5 to 65 percent

Elevation: 2,100 to 3,000 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 43 to 49 degrees F

Frost-free period: 90 to 130 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts

Typical Pedon

Blinn ashy silt loam, 35 to 65 percent slopes, stony, about 0.6 mile southeast of the south entrance of Heyburn State Park; about 1,800 feet south and 510 feet west of the northeast corner of section 7, T. 46 N., R. 3 W.; latitude 47 degrees, 20 minutes, 59.00 seconds north and longitude 116 degrees, 45 minutes, 32.50 seconds west, NAD 83; UTM 518195 meters east, 5244105 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 6 inches; light brownish gray (10YR 6/2) ashy silt loam, dark brown (10YR 3/3) moist; weak very thin and thin platy structure parting to weak very fine and fine granular; soft, very friable, nonsticky and nonplastic; many very fine, fine, and medium roots; many very fine and fine tubular pores; 6 percent gravel, 2 percent cobbles, and 2 percent stones; neutral (pH 7.2); clear smooth boundary.

Bw1—6 to 12 inches; pale brown (10YR 6/3) gravelly ashy silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; many very fine, fine, and medium roots; many very fine and fine tubular pores; 15 percent gravel, 5 percent cobbles, and 5 percent stones; neutral (pH 7.0); gradual smooth boundary.

Bw2—12 to 24 inches; pale brown (10YR 6/3) stony loam, brown (10YR 4/3) moist; weak medium prismatic structure parting to weak medium subangular blocky; slightly hard, firm, slightly sticky and nonplastic; common fine and medium roots; common very fine and fine tubular pores; 10 percent gravel, 10 percent cobbles, and 10 percent stones; neutral (pH 7.2); gradual smooth boundary.

C—24 to 39 inches; pale brown (10YR 6/3) very stony loam, brown (10YR 5/3) moist; weak medium and coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few fine and medium roots; few very fine and fine tubular pores; 1 percent fine distinct black (10YR 2/1) iron-manganese concretions; 10 percent gravel, 15 percent cobbles, and 30 percent stones; neutral (pH 6.8); gradual smooth boundary.

R—39 to 40 inches; very strongly cemented basalt; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 20 to 40 inches

Bobbitt Series

Depth class: Moderately deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, escarpments, structural benches

Parent material: Volcanic ash and loess over colluvium derived from basalt

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Slope range: 5 to 65 percent
Elevation: 2,100 to 3,100 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 95 to 130 days

Taxonomic class: Loamy-skeletal, isotic, mesic Vitrandic Argixerolls

Typical Pedon

Bobbitt stony ashy silt loam in an area of Lacy-Bobbitt complex, 5 to 35 percent slopes, stony, in Heyburn State Park; about 1,940 feet south and 320 feet east of the northwest corner of section 1, T. 46 N., R. 4 W.; latitude 47 degrees, 21 minutes, 41.10 seconds north and longitude 116 degrees, 47 minutes, 16.70 seconds west, NAD 83; UTM 516010 meters east, 5245350 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 9 inches; brown (10YR 5/3) stony ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak thin and medium platy structure parting to weak fine and medium granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium and coarse roots; common very fine interstitial pores; 10 percent gravel, 5 percent cobbles, and 10 percent stones; neutral (pH 6.8); diffuse smooth boundary.

Bt—9 to 23 inches; brown (10YR 5/3) very stony clay loam, dark brown (7.5YR 3/4) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common fine and medium and few coarse roots; common medium tubular pores; 25 percent continuous distinct clay films on faces of peds and in pores; 10 percent gravel, 15 percent cobbles, and 25 percent stones; neutral (pH 7.0); clear irregular boundary.

R—23 to 33 inches; very strongly cemented basalt; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 20 to 40 inches

Boulder creek Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 65 percent

Elevation: 3,000 to 4,650 feet

Mean annual precipitation: 30 to 40 inches

Mean annual air temperature: 41 to 44 degrees F

Frost-free period: 70 to 100 days

Taxonomic class: Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands

Typical Pedon

Boulder creek ashy silt loam, 35 to 65 percent slopes, about 6 miles north of St. Maries, Idaho; about 2,640 feet north and 705 feet east of the southwest corner of section 23, T. 47 N., R. 1 W.; latitude 47 degrees, 24 minutes, 27.30 seconds north

and longitude 116 degrees, 33 minutes, 45.08 seconds west, NAD 83; UTM 533006 meters east, 5250552 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; brown (10YR 5/3) ashy silt loam, dark brown (10YR 3/3) moist; weak very fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; 5 percent gravel and 5 percent channers; slightly acid (pH 6.2); abrupt irregular boundary.

Bw1—3 to 8 inches; yellowish brown (10YR 5/4) ashy silt loam, dark yellowish brown (10YR 3/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 10 percent gravel; slightly acid (pH 6.2); clear wavy boundary.

Bw2—8 to 17 inches; light yellowish brown (10YR 6/4) gravelly ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 20 percent gravel and 5 percent channers; slightly acid (pH 6.4); abrupt wavy boundary.

2BC—17 to 33 inches; pale brown (10YR 6/3) extremely cobbly loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular and irregular pores; 2 percent very fine mica flakes; 25 percent gravel, 10 percent channers, and 45 percent cobbles; slightly acid (pH 6.4); gradual wavy boundary.

2C1—33 to 43 inches; pale yellow (2.5Y 7/3) extremely gravelly fine sandy loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; many very fine and fine and common medium tubular and irregular pores; 2 percent very fine mica flakes; 40 percent gravel, 10 percent channers, and 20 percent cobbles; slightly acid (pH 6.4); gradual wavy boundary.

2C2—43 to 60 inches; light yellowish brown (2.5Y 6/4) extremely gravelly fine sandy loam, olive brown (2.5Y 4/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine, medium, coarse, and very coarse roots; many very fine and fine and common medium tubular and irregular pores; 2 percent very fine mica flakes; 45 percent gravel, 10 percent channers, and 10 percent cobbles; slightly acid (pH 6.4); gradual wavy boundary.

2C3—60 to 64 inches; light yellowish brown (2.5Y 6/4) extremely gravelly fine sandy loam, olive brown (2.5Y 4/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine, medium, and coarse roots; many very fine and fine and common medium tubular and irregular pores; 2 percent very fine mica flakes; 45 percent gravel, 10 percent channers, and 10 percent cobbles; slightly acid (pH 6.2).

Range in Characteristics

Thickness of ash mantle: 14 to 24 inches

Depth to strongly contrasting textural stratification (2BC horizon): 16 to 33 inches

Cald Series

Depth class: Very deep

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Drainageways, flood plains

Parent material: Loess, alluvium

Slope range: 0 to 2 percent

Elevation: 2,300 to 2,800 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Typic Argiaquolls

Typical Pedon

Cald silt loam in an area of Thatuna-Cald complex, 0 to 8 percent slopes; about 635 feet south and 1,370 feet east of the northwest corner of section 6, T. 46 N., R. 5 W.; latitude 47 degrees, 21 minutes, 51.70 seconds north and longitude 117 degrees, 1 minute, 3.70 seconds west, NAD 83; UTM 498665 meters east, 5245656 meters north, zone 11.

Ap1—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, black (10YR 2/1) moist; weak fine and medium subangular blocky structure parting to moderate very fine and fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; slightly acid (pH 6.5); clear smooth boundary.

Ap2—7 to 13 inches; dark grayish brown (10YR 4/2) silt loam, black (10YR 2/1) moist; weak medium and coarse subangular blocky structure parting to moderate very fine and fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; 2 percent prominent brown (7.5YR 4/4) and strong brown (7.5YR 4/6) oxidized iron masses and 1 percent faint gray (10YR 5/1) and distinct gray (10YR 6/1) iron depletions; slightly acid (pH 6.5); clear wavy boundary.

Ab—13 to 17 inches; dark gray (10YR 4/1) silt loam, black (10YR 2/1) moist; weak medium and thick platy structure parting to moderate very fine and fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium tubular pores; 10 percent patchy distinct white (10YR 8/1) silt coatings on bottom of peds; 2 percent prominent strong brown (7.5YR 4/6) oxidized iron masses; slightly acid (pH 6.3); gradual irregular boundary.

Ab/Bgb—17 to 25 inches; stratified, dark grayish brown (10YR 4/2) silt loam to very fine sandy loam, very dark brown (10YR 2/2) moist; 70 percent Ab material and 30 percent Bgb material; weak thin and medium platy structure parting to weak very fine and fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium tubular pores; 3 percent prominent strong brown (7.5YR 4/6) oxidized iron masses and 1 percent faint gray (10YR 5/1) and grayish brown (10YR 5/2) iron depletions; slightly acid (pH 6.5); clear smooth boundary.

Bgb1—25 to 40 inches; gray (10YR 5/1) silt loam, very dark gray (10YR 3/1) moist; weak medium and coarse subangular blocky structure parting to weak very fine and fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium tubular pores; 2 percent prominent iron-manganese masses and 3 percent prominent strong brown (7.5YR 4/6) oxidized iron masses; neutral (pH 7.2); clear wavy boundary.

Bgb2—40 to 48 inches; gray (10YR 5/1) silt loam, very dark gray (10YR 3/1) moist; weak thin and medium platy structure parting to moderate very fine and fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very

fine roots; many very fine and fine and few medium tubular and irregular pores; 2 percent prominent iron-manganese masses and 3 percent prominent strong brown (7.5YR 4/6) oxidized iron masses; neutral (pH 6.7); clear wavy boundary. Btgb—48 to 60 inches; gray (10YR 5/1) silty clay loam, very dark gray (10YR 3/1) moist; moderate medium and coarse angular blocky structure; hard, firm, very sticky and very plastic; few very fine roots; common very fine and fine and few medium tubular and irregular pores; 35 percent continuous distinct black (10YR 2/1) clay films on faces of peds and 15 percent patchy distinct black (10YR 2/1) organoargillans in pores; 5 percent discontinuous distinct light gray (10YR 7/1) and white (10YR 8/1) silt coatings on faces of peds and in pores; 5 percent prominent brown (7.5YR 4/4) oxidized iron masses and 3 percent distinct iron depletions; slightly alkaline (pH 7.5).

Range in Characteristics

Depth to highest seasonal water table: 11 to 13 inches in February through April

Flooding: Frequent, very brief periods in December through May

Caldwell Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Drainageways, hills

Parent material: Loess, alluvium

Slope range: 0 to 3 percent

Elevation: 2,300 to 2,650 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Cumulic Haploxerolls

Typical Pedon

Caldwell silt loam in an area of Thatuna-Caldwell complex, 0 to 4 percent slopes, about 3.5 miles south of Waverly, Washington; about 1,075 feet south and 2,034 feet west of the northeast corner of section 27, T. 21 N., R. 44 E.; latitude 47 degrees, 17 minutes, 9.30 seconds north and longitude 117 degrees, 13 minutes, 30.93 seconds west, NAD 83; UTM 482966 meters east, 5236963 meters north, zone 11.

Ap1—0 to 4 inches; dark grayish brown (10YR 4/2) silt loam, very dark gray (10YR 3/1) moist; moderate medium granular structure; moderately hard, firm, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine and few fine irregular pores; slightly acid (pH 6.5); abrupt wavy boundary.

Ap2—4 to 10 inches; dark grayish brown (10YR 4/2) silt loam, very dark gray (10YR 3/1) moist; moderate coarse subangular blocky structure parting to moderate thick platy; moderately hard, friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine and few fine irregular pores; neutral (pH 6.6); abrupt wavy boundary.

A1—10 to 16 inches; very dark grayish brown (10YR 3/2) silt loam, very dark gray (10YR 3/1) moist; strong very coarse prismatic structure parting to moderate very thick platy; moderately hard, friable, slightly sticky and slightly plastic; common very fine roots; common fine irregular pores; neutral (pH 6.8); clear wavy boundary.

- A2—16 to 21 inches; very dark grayish brown (10YR 3/2) silt loam, very dark gray (10YR 3/1) moist; strong very coarse prismatic structure parting to moderate very thick platy; moderately hard, friable, moderately sticky and slightly plastic; common very fine roots; many very fine and few fine irregular pores and few medium tubular pores; 1 percent fine prominent oxidized iron masses that are yellowish red (5YR 5/6) moist; 3 percent faint organic stains that are very dark gray (10YR 3/1) when moist and are on faces of peds; neutral (pH 6.9); clear wavy boundary.
- AB—21 to 30 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) and dark grayish brown (10YR 4/2) moist; moderate very coarse prismatic structure parting to moderate coarse subangular blocky; moderately hard, friable, moderately sticky and slightly plastic; few very fine roots; many very fine irregular and few medium tubular pores; 7 percent distinct clay films that are dark yellowish brown (10YR 4/4) when moist and are on faces of peds; 1 percent fine prominent oxidized iron masses that are yellowish red (5YR 5/6) when moist; neutral (pH 6.6); clear wavy boundary.
- Bw—30 to 40 inches; pale brown (10YR 6/3) silt loam, light olive brown (2.5Y 5/3), dark grayish brown (10YR 4/2), and brown (10YR 4/3) moist; moderate coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine and few fine irregular pores and few medium tubular pores; 18 percent faint organoargillans that are very dark gray (10YR 3/1) when moist and are in pores; 1 percent fine prominent oxidized iron masses that are yellowish red (5YR 5/6) when moist; 1 percent fine distinct iron-manganese nodules that are black (10YR 2/1) when moist; neutral (pH 7.1); clear wavy boundary.
- Bt1—40 to 52 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4), dark grayish brown (10YR 4/2), and yellowish brown (10YR 5/4) moist; moderate medium angular blocky structure; moderately hard, friable, slightly sticky and moderately plastic; few very fine roots; common very fine and few fine irregular pores and few medium tubular pores; 14 percent distinct clay films that are dark yellowish brown (10YR 4/4) when moist and are on faces of peds and 8 percent distinct organoargillans that are very dark gray (10YR 3/1) when moist and are in pores; 25 percent very coarse prominent oxidized iron masses that are yellowish red (5YR 5/6) when moist; 1 percent fine distinct iron-manganese nodules that are black (10YR 2/1) when moist; neutral (pH 7.2); clear wavy boundary.
- Bt2—52 to 60 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4), brown (10YR 4/3), and yellowish brown (10YR 5/4) moist; moderate medium angular blocky structure; moderately hard, friable, slightly sticky and moderately plastic; few very fine roots; common very fine and few fine irregular pores and few medium tubular pores; 17 percent faint clay films that are dark yellowish brown (10YR 4/4) when moist and are on faces of peds and 4 percent distinct organoargillans that are very dark gray (10YR 3/1) when moist and are in pores; 25 percent extremely coarse prominent oxidized iron masses that are yellowish red (5YR 5/6) when moist; 1 percent fine prominent iron-manganese nodules that are black (10YR 2/1) when moist; neutral (pH 7.2).

Range in Characteristics

Depth to highest seasonal water table: 16 to 21 inches in February through April

Flooding: Occasional, very brief periods in December through May

Carlinton Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus, mountains, foothills

Landform: Hills, mountain slopes

Parent material: Volcanic ash over loess

Slope range: 3 to 35 percent

Elevation: 2,550 to 3,650 feet

Mean annual precipitation: 25 to 34 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 130 days

Taxonomic class: Fine-silty, mixed, superactive, frigid Vitrandic Fragixeralfs

Typical Pedon

Carlinton ashy silt loam in an area of Carlinton, dry-Taney complex, 3 to 8 percent slopes, about 2 miles northeast of Plummer, Idaho; about 2,300 feet south and 850 feet west of the northeast corner of section 5, T. 46 N., R. 4 W.; latitude 47 degrees, 21 minutes, 37.00 seconds north and longitude 116 degrees, 51 minutes, 21.98 seconds west, NAD 83; UTM 510866 meters east, 5245211 meters north, zone 11.

Ap1—0 to 5 inches; brown (10YR 5/3) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; strongly acid (pH 5.1); gradual wavy boundary.

Ap2—5 to 10 inches; pale brown (10YR 6/3) ashy silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; strongly acid (pH 5.3); clear wavy boundary.

Bw—10 to 14 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; slightly acid (pH 6.2); abrupt wavy boundary.

EBt—14 to 20 inches; very pale brown (10YR 7/3) and pale brown (10YR 6/3) silt loam, pale brown (10YR 6/3) and brown (10YR 5/3) moist; weak coarse and very coarse prismatic structure; hard, firm, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; 15 percent patchy faint clay films on faces of peds and 5 percent discontinuous faint clay films in pores; 10 percent discontinuous faint very pale brown (10YR 7/3) silt coatings in root channels; slightly acid (pH 6.5); clear wavy boundary.

E—20 to 23 inches; white (2.5Y 8/1) and light gray (10YR 7/2) silt loam, light yellowish brown (2.5Y 6/3) and light brownish gray (2.5Y 6/2) moist; weak medium and coarse prismatic structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and few medium tubular pores; 5 percent fine prominent irregular yellowish brown (10YR 5/4) and light yellowish brown (10YR 6/4) masses of oxidized iron; 1 percent fine prominent iron-manganese concretions; slightly acid (pH 6.5); abrupt wavy boundary.

BtxbE—23 to 30 inches; pale yellow (2.5Y 8/2) and light yellowish brown (10YR 6/4) silt loam, light gray (10YR 7/2) and brown (10YR 4/3) moist; moderate coarse prismatic structure; extremely hard, extremely firm, slightly sticky and slightly plastic; few very fine and fine roots between peds; many very fine and fine and few medium tubular pores; 35 percent continuous faint clay films on faces of peds and 25 percent discontinuous faint clay films in pores; 15 percent discontinuous faint silt coatings on top of peds and 20 percent discontinuous faint silt coatings

- on vertical faces of peds; 1 percent fine prominent iron-manganese concretions; slightly acid (pH 6.5); clear wavy boundary.
- Btxb1—30 to 42 inches; pale brown (10YR 6/3) and light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 5/3) and dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure; extremely hard, extremely firm, moderately sticky and moderately plastic; brittle; many very fine and fine and few medium tubular pores; 25 percent continuous distinct brown (7.5YR 5/4) clay films on faces of peds and 15 percent discontinuous distinct clay films in pores; 30 percent continuous distinct light gray (2.5Y 7/2) silt coatings on vertical faces of peds; slightly acid (pH 6.5); gradual wavy boundary.
- Btxb2—42 to 53 inches; pale brown (10YR 6/3) and light yellowish brown (10YR 6/4) silty clay loam, yellowish brown (10YR 5/4) moist; weak medium and coarse prismatic structure; extremely hard, extremely firm, moderately sticky and moderately plastic; brittle; common very fine and fine tubular pores and few medium irregular pores; 15 percent continuous distinct brown (7.5YR 5/4) clay films on faces of peds and in pores; 35 percent continuous distinct light gray (2.5Y 7/2) silt coatings on vertical faces of peds; 1 percent fine prominent iron-manganese concretions; neutral (pH 6.8); gradual wavy boundary.
- Btb—53 to 60 inches; light yellowish brown (10YR 6/4) silty clay loam, yellowish brown (10YR 5/4) moist; weak medium and coarse prismatic structure; extremely hard, extremely firm, moderately sticky and moderately plastic; common very fine and fine tubular pores and few medium irregular pores; 15 percent continuous distinct brown (7.5YR 5/4) clay films on faces of peds and 10 percent discontinuous distinct clay films in pores; 20 percent continuous distinct light gray (2.5Y 7/2) silt coatings on vertical faces of peds and 15 percent discontinuous distinct silt coatings in root channels; neutral (pH 7.0).

Range in Characteristics

Depth to highest seasonal water table: 14 to 20 inches in February

Depth to fragipan: 21 to 40 inches

Cassyhill Series

Depth class: Shallow to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 5 to 65 percent

Elevation: 2,190 to 4,840 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 50 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, isotic, mesic Lithic Ultic Haploxerolls

Typical Pedon

Cassyhill very gravelly ashy silt loam, 35 to 65 percent slopes ([fig. 14](#)), about 2.8 miles northwest of St. Maries, Idaho; about 1,000 feet south and 2,150 feet west of the northeast corner of section 9, T. 46 N., R. 2 W.; latitude 47 degrees, 21 minutes,

7.61 seconds north and longitude 116 degrees, 35 minutes, 48.49 seconds west, NAD 83; UTM 530449 meters east, 5244358 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

A1—1 to 7 inches; grayish brown (10YR 5/2) very gravelly ashy silt loam, very dark grayish brown (10YR 3/2) moist; moderate very fine and fine subangular blocky structure parting to moderate fine granular; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine and fine tubular pores; 40 percent gravel and 10 percent channers; neutral (pH 6.6); clear smooth boundary.

A2—7 to 11 inches; brown (10YR 5/3) very gravelly ashy loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; many very fine and fine and few very coarse roots; many very fine and fine tubular pores; 30 percent gravel, 5 percent paragravel, 10 percent channers, 5 percent cobbles, and 5 percent flagstones; slightly acid (pH 6.1); clear smooth boundary.

C—11 to 14 inches; pale brown (10YR 6/3) extremely channery loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; common fine and medium roots; many very fine and fine tubular pores; 25 percent gravel, 35 percent channers, 15 percent cobbles, and 10 percent flagstones; moderately acid (pH 5.6); gradual wavy boundary.

R—14 to 24 inches; indurated argillite; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 10 to 20 inches

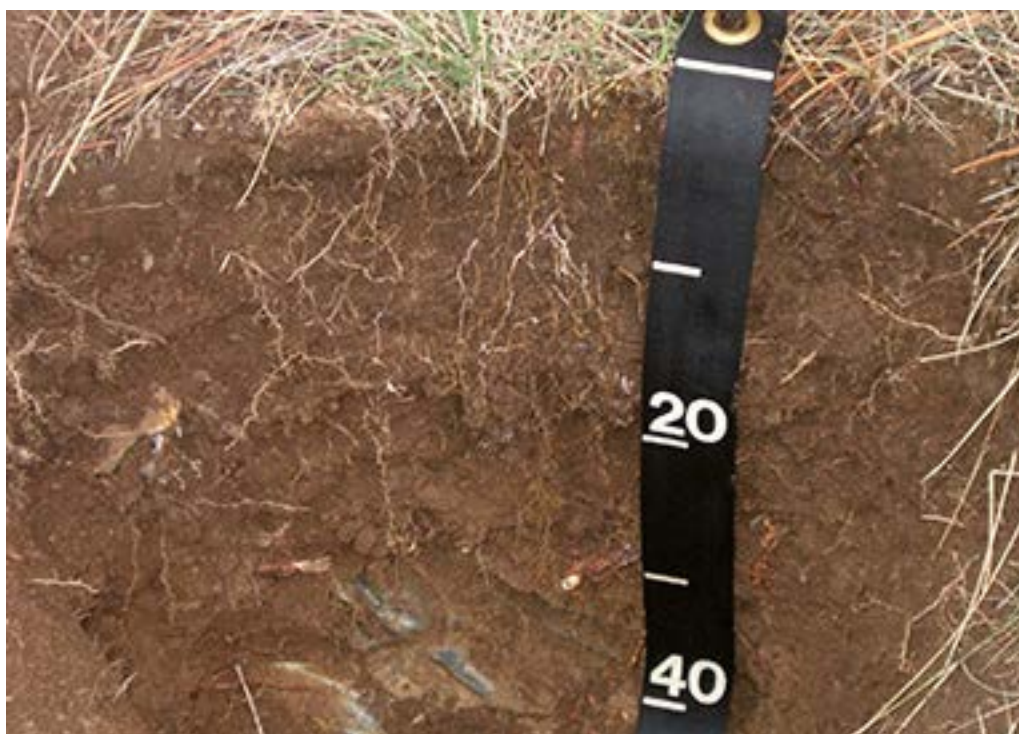


Figure 14.—Typical profile of Cassyhill very gravelly ashy silt loam, 35 to 65 percent slopes.
Numbers on tape indicate centimeters.

Chesley Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains, foothills, hills

Landform: Mountain slopes, ridges

Parent material: Volcanic ash over loess over colluvium over residuum derived from metasedimentary rock

Slope range: 10 to 60 percent

Elevation: 2,700 to 3,720 feet

Mean annual precipitation: 23 to 37 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 85 to 130 days

Taxonomic class: Ashy over loamy, amorphic over mixed, superactive, frigid Alfic Udivitrands

Typical Pedon

Chesley ashy silt loam in an area of Arson-Minaloosa complex, 25 to 60 percent slopes, about 6.5 miles north and 4 miles east of Princeton, Idaho; about 350 feet north and 700 feet west of the southeast corner of section 6, T. 42 N., R. 3 W.; latitude 47 degrees, 0 minutes, 34 seconds north and longitude 116 degrees, 45 minutes, 35 seconds west, NAD 83; UTM 518286 meters east, 5206232 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 3 inches; yellowish brown (10YR 5/4) ashy silt loam, dark yellowish brown (10YR 3/4) moist; moderate very fine and fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine, fine, medium, and coarse roots; common very fine and fine tubular pores; 2 percent channers; slightly acid (pH 6.5); abrupt smooth boundary.

Bw1—3 to 9 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 3/6) moist; weak fine and medium subangular blocky structure parting to moderate very fine and fine granular; soft, very friable, nonsticky and nonplastic; common very fine, fine, and medium roots; common very fine and fine tubular pores; 1 percent channers; neutral (pH 6.9); clear wavy boundary.

Bw2—9 to 20 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 3/6) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, fine, medium, and coarse roots; common very fine, fine, and medium tubular pores; neutral (pH 6.6); abrupt wavy boundary.

2Bt1—20 to 26 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and moderately plastic; common very fine and fine roots between peds; common very fine and fine tubular pores; 10 percent faint clay films in pores; 5 percent fine mica flakes; 5 percent channers; slightly acid (pH 6.2); clear wavy boundary.

2Bt2—26 to 34 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; hard, friable, moderately sticky and very plastic; common very fine and fine roots between peds; common very fine and fine tubular pores; 15 percent faint clay films on vertical faces of peds and 10 percent faint clay films in pores; 10 percent prominent silt coatings on faces of peds; 5 percent fine mica flakes; 5 percent channers; moderately acid (pH 6.0); clear wavy boundary.

- 3Bt3—34 to 43 inches; light gray (10YR 7/2) channery silt loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; hard, friable, slightly sticky and moderately plastic; common very fine and fine roots between peds; common very fine and fine tubular pores; 5 percent distinct clay films on faces of peds and 10 percent distinct clay films in pores and on rock fragments; 10 percent distinct silt coatings on faces of peds; 5 percent fine mica flakes; 20 percent channers; moderately acid (pH 6.0); abrupt wavy boundary.
- 3BCt—43 to 52 inches; very pale brown (10YR 7/3) very channery silt loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; hard, friable, slightly sticky and moderately plastic; common very fine roots between peds; common very fine tubular pores; 5 percent distinct clay films on rock fragments; 5 percent distinct silt coatings on rock fragments; 2 percent fine mica flakes; 50 percent channers; moderately acid (pH 5.9); clear wavy boundary.
- 3C—52 to 58 inches; very pale brown (10YR 7/3) very channery silt loam, yellowish brown (10YR 5/6) moist; massive; very hard, firm, slightly sticky and moderately plastic; common very fine roots around fragments; common very fine tubular pores and common fine irregular pores; 50 percent channers; moderately acid (pH 5.9); clear wavy boundary.
- 3Cr—58 to 64 inches; quartzite.

Range in Characteristics

Depth to paralithic bedrock: 50 to 60 inches

Thickness of ash mantle: 17 to 24 inches

DeVoignes Series

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Depressions, flood plains

Parent material: Stratified herbaceous organic material over mixed alluvium

Slope range: 0 to 1 percent

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-silty, mixed, active, nonacid, frigid Histic Humaquepts

Typical Pedon

DeVoignes mucky silt loam in an area of Ramsdell-DeVoignes complex, protected, drained, 0 to 2 percent slopes, about 0.5 mile northwest of St. Maries, Idaho; about 2,290 feet west and 1,060 feet south of the northeast corner of section 21, T. 46 N., R. 2 W.; latitude 47 degrees, 19 minutes, 26 seconds north and longitude 116 degrees, 35 minutes, 49 seconds west, NAD 83; UTM 530543 meters east, 5241176 meters north, zone 11.

Ap—0 to 9 inches; pale brown (10YR 6/3) mucky silt loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to moderate fine granular; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine and common medium tubular pores; very strongly acid (pH 4.8); abrupt smooth boundary.

- Oa/C—9 to 18 inches; grayish brown (10YR 5/2), stratified muck to silt loam, dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure parting to moderate fine granular; slightly hard, firm, slightly sticky and nonplastic; common fine roots between peds; many fine and common medium tubular pores; 15 percent fine prominent yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid (pH 4.5); abrupt smooth boundary.
- Oa/Cg—18 to 24 inches; grayish brown (10YR 5/2), stratified muck to silty clay loam, very dark gray (10YR 3/1) moist; weak coarse prismatic structure; very hard, very firm, moderately sticky and slightly plastic; common fine roots between peds; many very fine and common medium tubular pores; 20 percent fine prominent yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid (pH 4.6); abrupt smooth boundary.
- 2Cg1—24 to 41 inches; light brownish gray (10YR 6/2) silty clay loam, grayish brown (10YR 5/2) moist; moderate very coarse prismatic structure; very hard, very firm, moderately sticky and moderately plastic; common fine roots between peds; common very fine and fine tubular pores; 10 percent fine prominent yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid (pH 5.0); clear wavy boundary.
- 2Cg2—41 to 60 inches; gray (2.5Y 6/1), stratified silt loam to silty clay loam, dark gray (2.5Y 4/1) moist; moderate coarse prismatic structure; very hard, very firm, moderately sticky and moderately plastic; common fine roots between peds; common fine and medium tubular pores; 5 percent fine prominent yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid (pH 5.0).

Range in Characteristics

Depth to highest seasonal water table: At the surface to a depth of 20 inches in November through May

Depth to highest seasonal water table (protected, drained areas): At the surface to a depth of 12 inches in January through May

Flooding: Frequent, long periods in December through June

Flooding (protected, drained areas): Occasional, brief periods in December through June

Ponding: Frequent, long periods in December through June

Dorb Series

Depth class: Deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, escarpments

Parent material: Volcanic ash over colluvium derived from basalt

Slope range: 35 to 70 percent

Elevation: 2,200 to 3,300 feet

Mean annual precipitation: 28 to 34 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 85 to 110 days

Taxonomic class: Ashy-skeletal over loamy-skeletal, glassy over isotic, frigid Typic Udivitrands

Typical Pedon

Dorb cobbly ashy silt loam, warm, 35 to 70 percent slopes, stony; about 1,650 feet south and 960 feet west of the northeast corner of section 23, T. 46 N., R. 3 W.;

latitude 47 degrees, 19 minutes, 17.52 seconds north and longitude 116 degrees, 40 minutes, 32.31 seconds west, NAD 83; UTM 524499 meters east, 5240953 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; light brownish gray (10YR 6/2) cobbly ashy silt loam, dark brown (7.5YR 3/2) moist; weak very fine and fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and fine and common medium roots; common very fine and fine tubular and interstitial pores; 10 percent gravel and 10 percent cobbles; neutral (pH 6.8); abrupt wavy boundary.

Bw1—3 to 9 inches; pale brown (10YR 6/3) cobbly ashy silt loam, brown (7.5YR 4/3) moist; weak fine subangular blocky structure and moderate medium subangular blocky; slightly hard, friable, nonsticky and nonplastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine interstitial pores; 10 percent gravel and 15 percent cobbles; slightly acid (pH 6.3); clear wavy boundary.

Bw2—9 to 20 inches; light brownish gray (10YR 6/2) very cobbly ashy loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure and moderate medium subangular blocky; slightly hard, friable, nonsticky and nonplastic; many very fine and fine and common medium and coarse roots; many very fine and fine tubular and interstitial pores; 15 percent gravel and 30 percent cobbles; slightly acid (pH 6.1); abrupt wavy boundary.

2Bw3—20 to 32 inches; light yellowish brown (10YR 6/4) very cobbly loam, dark yellowish brown (10YR 3/4) moist; strong fine and medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; many fine and common medium and coarse roots; common very fine and fine tubular pores; 25 percent gravel and 20 percent cobbles; slightly acid (pH 6.2); gradual smooth boundary.

2BC—32 to 48 inches; brownish yellow (10YR 6/6) extremely cobbly loam, dark yellowish brown (10YR 4/6) moist; strong fine and medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; few fine, medium, and coarse roots; common very fine and fine tubular pores; 20 percent gravel and 50 percent cobbles; slightly acid (pH 6.5); abrupt smooth boundary.

R—48 to 58 inches; indurated basalt.

Range in Characteristics

Depth to lithic bedrock: 40 to 60 inches

Thickness of ash mantle: 17 to 24 inches

Driscoll Taxadjunct

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 25 percent

Elevation: 2,530 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Taxonomic class: Fine, mixed, superactive, mesic Aquic Palexerolls

Typical Pedon

Driscoll silt loam in an area of Southwick-Driscoll complex, 3 to 15 percent slopes, about 4 miles northwest of Plummer, Idaho, and 1.5 miles south of the county line; about 2,270 feet south and 695 feet east of the northwest corner of section 9, T. 46 N., R. 5 W.; latitude 47 degrees, 20 minutes, 41.38 seconds north and longitude 116 degrees, 58 minutes, 41.23 seconds west, NAD 83; UTM 501644 meters east, 5243476 meters north, zone 11.

Ap1—0 to 5 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to weak very fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few medium roots; many very fine and fine tubular pores; moderately acid (pH 5.6); clear smooth boundary.

Ap2—5 to 10 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine roots; many very fine and fine tubular pores; moderately acid (pH 5.6); gradual wavy boundary.

AB—10 to 17 inches; grayish brown (10YR 5/2) and brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) moist; moderate medium subangular blocky structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine and fine and few medium tubular pores; slightly acid (pH 6.2); clear irregular boundary.

EBtc—17 to 24 inches; pale brown (10YR 6/3) and brown (10YR 5/3) silt loam, brown (10YR 4/3) and dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine and fine and few medium and coarse tubular pores; 5 percent discontinuous distinct clay films in pores; 15 percent continuous distinct silt and sand coatings on faces of peds; 10 percent fine distinct iron-manganese concretions; slightly acid (pH 6.4); clear smooth boundary.

Ec—24 to 26 inches; light gray (2.5Y 7/2) silt loam, light yellowish brown (2.5Y 6/3) moist; weak fine subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine tubular pores; 20 percent continuous distinct silt and sand coatings on faces of peds; 15 percent fine distinct iron-manganese concretions; slightly acid (pH 6.5); abrupt smooth boundary.

Btb1—26 to 42 inches; yellowish brown (10YR 5/6 and 5/4) silty clay, dark brown (7.5YR 3/4) and brown (7.5YR 4/4) moist; strong coarse prismatic structure; extremely hard, extremely firm, very sticky and very plastic; common very fine roots; many very fine and fine tubular pores and few medium and coarse interstitial pores; 30 percent continuous distinct clay films that are brown (7.5YR 4/2) when moist and are on faces of peds and 15 percent distinct clay films in pores; 10 percent fine distinct iron-manganese concretions; 0.25-inch vertical cracks along faces of prisms throughout; neutral (pH 6.7); clear wavy boundary.

Btb2—42 to 49 inches; light yellowish brown (10YR 6/4) and yellowish brown (10YR 5/4) silty clay, brown (10YR 4/3) and dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure; moderately hard, firm, moderately sticky and moderately plastic; common very fine roots; common very fine and fine tubular pores and few medium interstitial pores; 30 percent continuous prominent clay films on faces of peds, 15 percent distinct clay films in pores, and 10 percent discontinuous prominent organoargillans on vertical faces of peds; 10 percent fine distinct iron-manganese concretions; neutral (pH 7.0); gradual wavy boundary.

Btb3—49 to 60 inches; light yellowish brown (10YR 6/4) and very pale brown (10YR 7/3) silty clay loam, dark yellowish brown (10YR 3/4) and brown (10YR 4/3) moist; moderate medium prismatic structure; moderately hard, firm, slightly sticky and slightly plastic; common very fine roots; common very fine and fine tubular pores and few medium interstitial pores; 25 percent continuous prominent clay films on faces of peds and 15 percent distinct clay films in pores; 10 percent fine distinct iron-manganese concretions; 2 percent gravel; slightly alkaline (pH 7.4).

Range in Characteristics

Depth to highest seasonal water table: 21 to 28 inches in January through April

Depth to strongly contrasting textural change (Btb1 horizon): 25 to 35 inches

Taxadjunct Features

The Driscoll soils in this survey area are considered a taxadjunct to the Driscoll series because the perched water table meets the criteria for the Aquic subgroup.

Endoaquolls

Depth class: Very deep

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills, basalt plateaus, mountains

Landform: Drainageways, flood plains, stream terraces

Parent material: Mixed alluvium

Slope range: 0 to 1 percent

Elevation: 2,150 to 3,020 feet

Mean annual precipitation: 18 to 35 inches

Mean annual air temperature: 41 to 49 degrees F

Frost-free period: 90 to 135 days

Taxonomic class: Endoaquolls

Typical Pedon

Endoaquolls loam in an area of Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes, about 7 miles north of Nine Mile Falls; about 100 feet north and 700 feet east of the southwest corner of section 4, T. 27 N., R. 42 E.; latitude 47 degrees, 51 minutes, 37.10 seconds north and longitude 117 degrees, 30 minutes, 59.30 seconds west, NAD 83; UTM 461370 meters east, 5300903 meters north, zone 11.

Ap—0 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; strong medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many fine irregular pores and many medium tubular pores; neutral (pH 7.2); abrupt smooth boundary.

A—5 to 11 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many fine irregular pores and many medium tubular pores; 2 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; neutral (pH 7.2); clear smooth boundary.

Bg1—11 to 19 inches; light brownish gray (10YR 6/2) sandy loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common fine

irregular pores; 5 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; neutral (pH 7.2); clear smooth boundary.

Bg2—19 to 28 inches; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common fine irregular pores; 10 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; neutral (pH 7.2); clear smooth boundary.

Cg—28 to 45 inches; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common fine irregular pores; 20 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; neutral (pH 7.2); clear smooth boundary.

C—45 to 60 inches; light yellowish brown (2.5Y 6/3) sandy loam, olive brown (2.5Y 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; common fine irregular pores; 25 percent coarse prominent strong brown (7.5YR 5/6) masses of oxidized iron; small pockets of fine sandy loam and loamy sand throughout; neutral (pH 7.2).

Range in Characteristics

Depth to highest seasonal water table: At the surface to a depth of 5 inches in January through April

Flooding: Frequent, long periods in December through June

Garfield Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 5 to 20 percent

Elevation: 2,500 to 2,900 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Taxonomic class: Fine, mixed, superactive, mesic Mollic Haploxeralfs

Typical Pedon

Garfield silt loam in an area of Naff-Garfield complex, 5 to 25 percent slopes; about 2,850 feet south and 2,740 feet east of the northwest corner of section 6, T. 22 N., R. 44 E.; latitude 47 degrees, 25 minutes, 37.63 seconds north and longitude 117 degrees, 17 minutes, 32.35 seconds west, NAD 83; UTM 477954 meters east, 5252672 meters north, zone 11.

Ap1—0 to 5 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine tubular pores; slightly acid (pH 6.2); abrupt wavy boundary.

Ap2—5 to 8 inches; brown (10YR 4/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine and fine tubular pores; slightly acid (pH 6.2); clear wavy boundary.

- Btb1—8 to 19 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; very hard, extremely firm, moderately sticky and very plastic; few very fine roots between peds; common very fine and few fine tubular pores; 40 percent continuous faint clay films that are dark yellowish brown (10YR 3/4) when moist and are on faces of peds; 5 percent fine faint iron-manganese nodules; neutral (pH 6.9); gradual wavy boundary.
- Btb2—19 to 32 inches; yellowish brown (10YR 5/4) silty clay, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; hard, very firm, moderately sticky and very plastic; few very fine roots between peds; few very fine and fine tubular pores; 35 percent continuous faint clay films that are dark brown (10YR 3/3) when moist and are on faces of peds; 5 percent fine faint iron-manganese nodules; neutral (pH 7.0); gradual wavy boundary.
- Btb3—32 to 45 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; moderately hard, firm, slightly sticky and moderately plastic; few very fine roots between peds; few very fine and fine tubular pores; 35 percent continuous faint clay films that are dark brown (10YR 3/3) when moist and are on faces of peds; 2 percent fine faint iron-manganese nodules; neutral (pH 7.0); gradual wavy boundary.
- Btb4—45 to 60 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 4/3) moist; moderate coarse prismatic structure parting to moderate coarse subangular blocky; moderately hard, firm, slightly sticky and moderately plastic; few very fine tubular pores; 35 percent continuous faint clay films that are dark brown (10YR 3/3) when moist and are on faces of peds; 2 percent fine distinct iron-manganese nodules; neutral (pH 7.0).

Grangemont Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills

Parent material: Volcanic ash over loess

Slope range: 5 to 25 percent

Elevation: 2,700 to 3,400 feet

Mean annual precipitation: 28 to 33 inches

Mean annual air temperature: 41 to 44 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Fine-silty, mixed, active, frigid Andic Glossudalfs

Typical Pedon

Grangemont ashy silt loam, 5 to 25 percent slopes, about 2.5 miles southeast of Plummer Butte; about 1,400 feet north and 150 feet west of the southeast corner of section 27, T. 46 N., R. 4 W.; latitude 47 degrees, 17 minutes, 51.60 seconds north and longitude 116 degrees, 48 minutes, 40.40 seconds west, NAD 83; UTM 514273 meters east, 5238262 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; brown (10YR 5/3) ashy silt loam, dark brown (10YR 3/3) moist; weak very fine and fine granular structure; soft, very friable, slightly sticky and slightly

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plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; slightly acid (pH 6.5); abrupt wavy boundary.

Bw—4 to 10 inches; pale brown (10YR 6/3) ashy silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; slightly acid (pH 6.2); clear wavy boundary.

2E/Bt1—10 to 18 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist (E part); dark yellowish brown (10YR 4/4) silt loam, very dark brown (10YR 2/2) moist (B part); weak medium subangular blocky structure; moderately hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 15 percent faint clay films in pores; 1 percent fine gravel; moderately acid (pH 6.0); clear wavy boundary

2E/Bt2—18 to 25 inches; pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist (B part); weak medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 15 percent prominent brown (7.5YR 5/4) clay films in pores; 35 percent faint skeletans on faces of peds; 35 percent faint silt coatings on faces of peds; 1 percent fine gravel; strongly acid (pH 5.5); gradual wavy boundary.

2Btx/E1—25 to 34 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); pale yellow (2.5Y 7/3) silt loam, olive brown (2.5Y 5/3) moist (E part); weak coarse prismatic structure parting to moderate fine and medium angular blocky; hard, firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine, common medium, and few coarse tubular pores; 35 percent distinct brown (7.5YR 4/4) and prominent strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 35 percent distinct and prominent skeletans on faces of peds; 35 percent distinct and prominent silt coatings on faces of peds; 1 percent fine gravel; strongly acid (pH 5.5); gradual wavy boundary.

2Btx/E2—34 to 42 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); weak very coarse prismatic structure; hard, firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots in cracks; many very fine and fine and few medium and coarse tubular pores; 35 percent distinct brown (7.5YR 4/4) and prominent strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 35 percent distinct and prominent skeletans on faces of peds; 35 percent distinct and prominent silt coatings on faces of peds; 1 percent fine gravel; strongly acid (pH 5.5); gradual wavy boundary.

2Btx/E3—42 to 53 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); pale yellow (2.5Y 8/2 and 7/3) silt loam, light olive brown (2.5Y 5/3) and light brownish gray (2.5Y 6/2) moist (E part); weak and moderate very coarse prismatic structure; very hard, firm, slightly sticky and slightly plastic; few very fine and fine roots in cracks; many very fine and fine and few medium and coarse tubular pores; 35 percent distinct brown (7.5YR 4/4) and prominent strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 35 percent distinct and prominent skeletans on faces of peds; 35 percent distinct and prominent silt coatings on faces of peds; 1 percent fine gravel; strongly acid (pH 5.1); clear wavy boundary.

2Btxb—53 to 63 inches; yellowish brown (10YR 5/6) and light yellowish brown (10YR 6/4) cobbly silty clay loam, dark yellowish brown (10YR 4/6 and 4/4) moist; weak

coarse prismatic structure parting to moderate medium angular blocky; extremely hard, very firm, moderately sticky and moderately plastic; many very fine and fine and few medium and coarse tubular pores; 70 percent distinct and prominent very dark brown (7.5YR 2/3), brown (7.5YR 4/4), and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 15 percent prominent pale yellow (2.5Y 8/2) skeletons on faces of peds and in root channels; 1 percent fine distinct strong brown (7.5YR 5/6) and reddish yellow (7.5YR 6/6) masses of oxidized iron; 5 percent gravel and 20 percent cobbles; strongly acid (pH 5.1).

Range in Characteristics

Thickness of ash mantle: 7 to 13 inches

Hobo Series

Depth class: Very deep (fig. 15)

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 5 to 40 percent

Elevation: 2,800 to 3,600 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Ashy over loamy, amorphic over isotic, frigid Oxyaquic Udivitrands

Typical Pedon

Hobo ashy silt loam in an area of Hobo-Threebear complex, warm, 5 to 35 percent slopes, about 4 miles southwest of St. Maries, Idaho; about 1,660 feet north and 560 feet east of the southwest corner of section 5, T. 45 N., R. 2 W.; latitude 47 degrees, 16 minutes, 20.50 seconds north and longitude 116 degrees, 37 minutes, 36.50 seconds west, NAD 83; UTM 528228 meters east, 5235499 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; neutral (pH 6.8); clear smooth boundary.

Bw1—3 to 8 inches; yellowish brown (10YR 5/4) ashy silt loam, dark yellowish brown (10YR 3/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 1 percent gravel; slightly acid (pH 6.3); gradual smooth boundary.

Bw2—8 to 18 inches; very pale brown (10YR 7/4) ashy silt loam, yellowish brown (10YR 5/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 1 percent gravel; slightly acid (pH 6.3); abrupt smooth boundary.



Figure 15.—Typical profile of a Hobo ashy silt loam. Numbers on tape indicate centimeters.

- 2BEt—18 to 22 inches; light brown (7.5YR 6/4) silt loam, brown (7.5YR 4/4) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 5 percent patchy faint brown (7.5YR 5/4) clay films on faces of peds; 25 percent distinct very pale brown (10YR 7/3) and prominent light gray (10YR 7/2) silt coatings on faces of peds and in pores; 5 percent gravel; slightly acid (pH 6.3); abrupt irregular boundary.
- 2E/Bt—22 to 30 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist (E part); brown (7.5YR 5/4) silt loam, brown (7.5YR 4/4) moist (B part); weak fine and medium prismatic structure parting to moderate fine and medium angular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium tubular pores; 25 percent patchy prominent brown (7.5YR 4/4 and 5/4) clay films on faces of peds and in pores; 25 percent faint and distinct silt coatings on faces of peds; 10 percent gravel; moderately acid (pH 6.0); gradual wavy boundary.
- 2Bt/E—30 to 44 inches; light yellowish brown (10YR 6/4) gravelly loam, dark yellowish brown (10YR 4/4) moist (B part); very pale brown (10YR 7/4) gravelly loam, light yellowish brown (10YR 6/4) moist (E part); weak medium and coarse prismatic

structure parting to moderate fine and medium angular blocky; hard, firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium tubular pores; 25 percent patchy distinct brown (7.5YR 5/4) clay films on faces of peds and in pores; 25 percent faint and distinct silt coatings on faces of peds; 15 percent gravel; slightly acid (pH 6.2); abrupt wavy boundary.

2BCt—44 to 60 inches; pale yellow (2.5Y 8/3) and very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) and light yellowish brown (2.5Y 6/3) moist; weak medium and coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular and interstitial pores; 5 percent patchy prominent brown (7.5YR 4/4) clay films in pores and on rock fragments; 5 percent faint and distinct silt coatings on faces of peds; 40 percent gravel, 10 percent paragravel, and 5 percent cobbles; strongly acid (pH 5.2).

Range in Characteristics

Thickness of ash mantle: 14 to 20 inches

Depth to highest seasonal water table: 14 to 22 inches in February through April

Depth to strongly contrasting textural stratification (2BC horizon): 42 to 52 inches

Honeyjones Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over colluvium derived from siltstone, argillite, and quartzite

Slope range: 15 to 75 percent

Elevation: 2,500 to 4,780 feet

Mean annual precipitation: 30 to 42 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands

Typical Pedon

Honeyjones ashy silt loam, warm, 35 to 65 percent slopes, southwest of St. Maries, Idaho; about 2,210 feet south and 900 feet east of the northwest corner of section 33, T. 46 N., R. 2 W.; latitude 47 degrees, 17 minutes, 28 seconds north and longitude 116 degrees, 36 minutes, 14 seconds west, NAD 83; UTM 529951 meters east, 5237591 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; neutral (pH 6.7); clear irregular boundary.

Bw1—3 to 7 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common

- medium, and few coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; neutral (pH 6.8); clear wavy boundary.
- Bw2—7 to 19 inches; very pale brown (10YR 7/4) ashy silt loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; slightly acid (pH 6.5); abrupt wavy boundary.
- 2Bw3—19 to 24 inches; pale brown (10YR 6/3) very gravelly silt loam, brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular pores; 40 percent gravel and 5 percent cobbles; slightly acid (pH 6.5); clear wavy boundary.
- 2C1—24 to 35 inches; very pale brown (10YR 7/3) extremely gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, medium, and coarse roots; many very fine and fine and common medium tubular and irregular pores; 50 percent gravel, 10 percent channers, and 5 percent cobbles; neutral (pH 6.6); gradual wavy boundary.
- 2C2—35 to 47 inches; pale yellow (2.5Y 7/3) extremely cobbly loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular and irregular pores; 45 percent gravel and 40 percent cobbles; neutral (pH 6.6); gradual wavy boundary.
- 2C3—47 to 60 inches; pale yellow (2.5Y 7/3) extremely stony silt loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and common medium tubular and irregular pores; 20 percent gravel, 25 percent cobbles, and 40 percent stones; neutral (pH 6.6).

Range in Characteristics

Thickness of ash mantle: 14 to 24 inches

Depth to strongly contrasting textural stratification (2Bw horizon): 19 to 35 inches

Huckle Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over colluvium over residuum derived from quartzite and siltstone

Slope range: 5 to 65 percent

Elevation: 2,200 to 4,800 feet

Mean annual precipitation: 25 to 40 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands

Typical Pedon

Huckle ashy silt loam in an area of Ardenvoir-Huckle association, 35 to 65 percent slopes, southeast of Plummer, Idaho; about 1,650 feet north and 1,880 feet west of the southeast corner of section 26, T. 46 N., R. 4 W.; latitude 47 degrees, 17 minutes,

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54 seconds north and longitude 116 degrees, 47 minutes, 48 seconds west, NAD 83; UTM 515372 meters east, 5238338 meters north, zone 11.

Oi—0 to 2 inches; slightly decomposed plant material.

Oe—2 to 3 inches; moderately decomposed plant material.

A—3 to 4 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and common medium tubular pores; 10 percent gravel; neutral (pH 7.0); abrupt wavy boundary.

Bw1—4 to 8 inches; yellowish brown (10YR 5/4) ashy silt loam, dark yellowish brown (10YR 3/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and common medium tubular pores; 10 percent gravel; neutral (pH 6.8); gradual wavy boundary.

Bw2—8 to 13 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and common medium tubular pores; 10 percent gravel; neutral (pH 6.6); gradual wavy boundary.

Bw3—13 to 19 inches; light yellowish brown (10YR 6/4) gravelly ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 15 percent gravel; slightly acid (pH 6.5); abrupt wavy boundary.

2Bw4—19 to 28 inches; pale brown (10YR 6/3) very cobbly silt loam, brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 15 percent gravel and 35 percent cobbles; neutral (pH 6.6); clear wavy boundary.

2BC—28 to 38 inches; very pale brown (10YR 8/4) extremely cobbly silt loam, light yellowish brown (10YR 6/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and fine and few medium and coarse tubular pores; 20 percent gravel, 3 percent paragravel, and 40 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

2C—38 to 47 inches; yellow (10YR 8/6) extremely cobbly loam, brownish yellow (10YR 6/6) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and fine and few medium and coarse tubular pores; 20 percent gravel, 10 percent paragravel, 40 percent cobbles, and 5 percent stones; slightly acid (pH 6.5); clear wavy boundary.

2Cr—47 to 57 inches; moderately cemented metasedimentary rock; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Thickness of ash mantle: 14 to 24 inches

Hugus Series

Depth class: Very deep ([fig. 16](#))

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high



Figure 16.—Typical profile of Hugus ashy silt loam, warm, 30 to 65 percent slopes.

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Parent material: Volcanic ash over alluvium and/or colluvium derived from metasedimentary rock

Slope range: 30 to 65 percent

Elevation: 2,830 to 3,900 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 120 days

Taxonomic class: Ashy over loamy-skeletal, amorphic over isotic, frigid Alfic Udivitrands

Typical Pedon

Hugus ashy silt loam in an area of Tigley, moist-Hugus complex, 30 to 65 percent slopes, northwest of St. Maries, Idaho; about 2,075 feet north and 1,750 feet west of the southeast corner of section 29, T. 47 N., R. 2 W.; latitude 47 degrees, 23 minutes,

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29.15 seconds north and longitude 116 degrees, 36 minutes, 53.28 seconds west, NAD 83; UTM 529070 meters east, 5248736 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; pale brown (10YR 6/3) ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; 5 percent gravel; slightly acid (pH 6.2); clear wavy boundary.

Bw1—4 to 9 inches; light yellowish brown (10YR 6/4) ashy silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; slightly acid (pH 6.3); gradual wavy boundary.

Bw2—9 to 20 inches; very pale brown (10YR 7/4) ashy silt loam, yellowish brown (10YR 5/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; slightly acid (pH 6.3); abrupt wavy boundary.

2Bt1—20 to 25 inches; pale yellow (2.5Y 7/3) very gravelly silt loam, brown (10YR 5/3) very moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 5 percent patchy faint clay films on faces of peds; 5 percent faint silt coatings on faces of peds and in pores; 35 percent gravel; slightly acid (pH 6.4); clear wavy boundary.

2Bt2—25 to 31 inches; pale yellow (2.5Y 7/3) very gravelly silt loam, brown (10YR 5/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 5 percent patchy faint and distinct clay films on faces of peds and in pores; 5 percent faint silt coatings on faces of peds and in pores; 35 percent gravel; slightly acid (pH 6.4); gradual wavy boundary.

2Bt3—31 to 38 inches; pale yellow (2.5Y 7/3) extremely gravelly silt loam, brown (10YR 5/3) moist; weak medium and coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine, common medium, and few coarse tubular pores; 25 percent patchy prominent yellowish brown (10YR 5/4) and brown (7.5YR 5/4) clay films on faces of peds, in pores, and on rock fragments; 5 percent faint silt coatings on faces of peds and in pores; 50 percent gravel, 10 percent cobbles, and 5 percent stones; slightly acid (pH 6.4); gradual wavy boundary.

2Bt4—38 to 47 inches; pale yellow (2.5Y 7/3) extremely gravelly silt loam, light yellowish brown (2.5Y 6/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and few medium and coarse tubular pores; 5 percent patchy prominent yellowish brown (10YR 5/4) and brown (7.5YR 5/4) clay films on faces of peds, in pores, and on rock fragments; 50 percent gravel, 15 percent cobbles, and 5 percent stones; slightly acid (pH 6.4); gradual wavy boundary.

2Bt5—47 to 60 inches; pale yellow (2.5Y 7/3) extremely gravelly loam, light olive brown (2.5Y 5/3) and light yellowish brown (2.5Y 6/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic;

few very fine roots; common very fine and fine and few medium and coarse tubular and irregular pores; 5 percent patchy prominent yellowish brown (10YR 5/4) and brown (7.5YR 5/4) clay films on faces of peds and on rock fragments; 60 percent gravel and 5 percent cobbles; slightly acid (pH 6.4).

Range in Characteristics

Thickness of ash mantle: 14 to 23 inches

Depth to strongly contrasting textural stratification (2BC horizon): 20 to 40 inches

Kauder Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills

Landform: Hillslopes, interfluves

Parent material: Volcanic ash over loess

Slope range: 10 to 35 percent

Elevation: 2,700 to 3,400 feet

Mean annual precipitation: 26 to 28 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 85 to 120 days

Taxonomic class: Fine-silty, mixed, active, frigid Andic Fragiudalfs

Typical Pedon

Kauder medial silt loam in an area of Reggear-Stewah complex, 10 to 35 percent slopes; about 725 feet north and 2,600 feet west of the southeast corner of section 17, T. 40 N., R. 1 E.; latitude 46 degrees, 48 minutes, 21 seconds north and longitude 116 degrees, 21 minutes, 44 seconds west, NAD 83; UTM 548663 meters east, 5183785 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; yellowish brown (10YR 5/4) medial silt loam, dark brown (7.5YR 3/4) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine tubular and irregular pores; moderately acid (pH 5.7); abrupt smooth boundary.

Bw1—3 to 9 inches; yellowish brown (10YR 5/4) medial silt loam, dark brown (7.5YR 3/4) moist; weak fine and medium subangular blocky structure parting to weak very fine and fine granular; soft, very friable, nonsticky and nonplastic; common very fine, fine, and medium roots; common very fine and fine tubular and irregular pores; moderately acid (pH 5.7); clear smooth boundary.

Bw2—9 to 13 inches; light yellowish brown (10YR 6/4) medial silt loam, dark brown (7.5YR 3/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, fine, medium, and coarse roots; common very fine and fine tubular and irregular pores; moderately acid (pH 5.8); abrupt wavy boundary.

2EB—13 to 19 inches; very pale brown (10YR 7/3) silt loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and moderately plastic; common very fine, fine, medium, and coarse roots; common very fine and fine tubular and irregular pores; 1 percent distinct clay films in pores; 5 percent faint silt coatings on faces of peds; 2 percent fine mica flakes; strongly acid (pH 5.5); clear irregular boundary.

- 2E/B—19 to 31 inches; 70 percent very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist (E part); 30 percent yellowish brown (10YR 5/4) silt loam, dark yellowish brown (10YR 4/6) moist (B part); weak fine and medium prismatic structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and fine roots between peds; common very fine and fine tubular and irregular pores; 10 percent faint clay films on faces of peds and 5 percent distinct clay films in pores; 2 percent fine mica flakes; strongly acid (pH 5.4); clear irregular boundary.
- 2B/E—31 to 40 inches; 80 percent light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 3/6) moist (B part); 20 percent very pale brown (10YR 8/2) silt loam, yellowish brown (10YR 5/4) moist (E part); moderate fine and medium subangular blocky structure and moderate very coarse prismatic; hard, friable, moderately sticky and moderately plastic; common very fine roots between peds; common very fine tubular and irregular pores; 15 percent distinct clay films in pores; 20 percent faint silt coatings on faces of peds; 2 percent fine mica flakes; strongly acid (pH 5.2); clear wavy boundary.
- 2Btx1—40 to 45 inches; light yellowish brown (10YR 6/4) silty clay loam, strong brown (7.5YR 4/6) moist; moderate very coarse prismatic structure; hard, firm, moderately sticky and very plastic; common very fine tubular and irregular pores; 20 percent distinct clay films in pores; 30 percent distinct silt coatings on faces of peds; 5 percent fine mica flakes; strongly acid (pH 5.1); clear wavy boundary.
- 2Btx2—45 to 51 inches; brownish yellow (10YR 6/6) silty clay loam, strong brown (7.5YR 4/6) moist; moderate very coarse prismatic structure; very hard, firm, very sticky and very plastic; common very fine tubular and irregular pores; 15 percent prominent clay films on faces of peds and 20 percent distinct clay films in pores; 15 percent prominent silt coatings on faces of peds; 5 percent fine mica flakes; very strongly acid (pH 5.0); clear wavy boundary.
- 2Btx3—51 to 60 inches; reddish yellow (7.5YR 6/6) silt loam, strong brown (7.5YR 4/6) moist; moderate very coarse prismatic structure; very hard, firm, very sticky and very plastic; common very fine tubular and irregular pores; 5 percent prominent clay films on faces of peds; 5 percent distinct silt coatings on faces of peds; 5 percent fine mica flakes; very strongly acid (pH 5.0).

Range in Characteristics

Depth to fragipan: 31 to 40 inches

Thickness of ash mantle: 7 to 14 inches

Kingspeak Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills, structural benches

Parent material: Volcanic ash and loess over alluvium and lacustrine deposits

Slope range: 3 to 30 percent

Elevation: 2,130 to 3,050 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 115 days

Taxonomic class: Coarse-loamy, isotic, frigid Vitrandic Hapludalfs

Typical Pedon

Kingspeak ashy silt loam, cool, 5 to 30 percent slopes, about 5 miles northeast of Plummer, Idaho, in Heyburn State Park, on the south side of Plummer Creek; about 2,500 feet north and 470 feet east of the southwest corner of section 1, T. 46 N., R. 4 W.; latitude 47 degrees, 21 minutes, 31.40 seconds north and longitude 116 degrees, 47 minutes, 15.70 seconds west, NAD 83; UTM 516033 meters east, 5245051 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; light brownish gray (10YR 6/2) ashy silt loam, dark grayish brown (10YR 4/2) moist; moderate very fine and fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and few medium tubular pores; 1 percent very fine mica flakes; slightly acid (pH 6.5); abrupt wavy boundary.

Bw—3 to 10 inches; very pale brown (10YR 7/3) ashy silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 1 percent very fine mica flakes; slightly acid (pH 6.5); clear wavy boundary.

E/Bt1—10 to 20 inches; pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); weak thick platy structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 5 percent faint clay bridges between sand grains; 1 percent very fine mica flakes; 2 percent gravel; slightly acid (pH 6.5); gradual wavy boundary.

E/Bt2—20 to 24 inches; pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); weak thick and very thick platy structure; hard, friable, slightly sticky and slightly plastic; common fine and medium and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 5 percent faint clay films on faces of peds; 5 percent faint light gray (2.5Y 7/2) silt coatings on faces of peds; 1 percent very fine mica flakes; 2 percent gravel; slightly acid (pH 6.2); clear wavy boundary.

E/Bt3—24 to 30 inches; light yellowish brown (2.5Y 6/4) silt loam, olive brown (2.5Y 4/3) moist (E part); light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); weak coarse prismatic structure; hard, friable, slightly sticky and slightly plastic; few very fine, fine, medium, and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 25 percent faint clay films on faces of peds; 5 percent distinct light gray (2.5Y 7/2) silt coatings on faces of peds; 1 percent very fine mica flakes; 5 percent gravel and 5 percent cobbles; slightly acid (pH 6.3); gradual wavy boundary.

Bt/E1—30 to 48 inches; very pale brown (10YR 7/4) silt loam, yellowish brown (10YR 5/4) moist (B part); pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); moderate coarse prismatic structure; extremely hard, extremely firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium and coarse tubular pores; 25 percent distinct and prominent dark yellowish brown (10YR 4/4) and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 5 percent prominent light gray (2.5Y 7/2) silt coatings on faces of peds; 1 percent fine prominent iron-manganese masses; 1 percent very fine mica flakes; 3 percent gravel; slightly acid (pH 6.3); gradual wavy boundary.

- Bt/E2—48 to 55 inches; yellow (10YR 7/6) silt loam, yellowish brown (10YR 5/6) moist (B part); pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); weak coarse prismatic structure; extremely hard, extremely firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium and coarse tubular pores; 35 percent distinct and prominent dark yellowish brown (10YR 4/4) and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 5 percent prominent light gray (2.5Y 7/2) silt coatings on faces of peds; 1 percent fine prominent iron-manganese masses; 1 percent very fine mica flakes; 1 percent gravel; slightly acid (pH 6.3); gradual wavy boundary.
- Bt/E3—55 to 60 inches; yellow (10YR 7/6) silt loam, yellowish brown (10YR 5/6) moist (B part); pale yellow (2.5Y 7/3) silt loam, light olive brown (2.5Y 5/3) moist (E part); weak medium and thick platy structure; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and few medium and coarse tubular pores; 35 percent distinct and prominent dark yellowish brown (10YR 4/4) and strong brown (7.5YR 4/6) clay films on faces of peds and in pores; 25 percent prominent light gray (2.5Y 7/2) silt coatings on faces of peds; 1 percent fine prominent iron-manganese masses; 1 percent very fine mica flakes; 10 percent gravel; slightly acid (pH 6.3).

Lacy Series

Depth class: Shallow to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, escarpments, structural benches

Parent material: Loess over colluvium derived from basalt

Slope range: 5 to 65 percent

Elevation: 2,120 to 3,100 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Ultic Argixerolls

Typical Pedon

Lacy stony silt loam in an area of Lacy-Bobbitt complex, 5 to 35 percent slopes, stony, east of Plummer, Idaho, in Heyburn State Park; about 2,250 feet north and 2,050 feet east of the southwest corner of section 12, T. 46 N., R. 4 W.; latitude 47 degrees, 20 minutes, 36.84 seconds north and longitude 116 degrees, 46 minutes, 51.75 seconds west, NAD 83; UTM 516539 meters east, 5243368 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A1—2 to 3 inches; brown (10YR 5/3) stony silt loam, dark brown (7.5YR 3/2) moist; weak fine and medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 10 percent gravel, 5 percent cobbles, and 5 percent stones; slightly acid (pH 6.5); clear wavy boundary.

A2—3 to 10 inches; brown (10YR 4/3) stony silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine subangular blocky structure; slightly hard, friable,

slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 10 percent gravel, 10 percent cobbles, and 10 percent stones; slightly acid (pH 6.5); clear wavy boundary.

Bt1—10 to 14 inches; brown (10YR 4/3) very stony silt loam, dark brown (7.5YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 10 percent continuous faint clay films on faces of peds and in pores; 5 percent gravel, 5 percent cobbles, and 45 percent stones; slightly acid (pH 6.4); clear wavy boundary.

Bt2—14 to 17 inches; yellowish brown (10YR 5/4) extremely stony loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 30 percent continuous faint clay films on faces of peds; 5 percent gravel, 5 percent cobbles, and 75 percent stones; slightly acid (pH 6.4); abrupt irregular boundary.

R—17 to 27 inches; indurated basalt; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 10 to 20 inches

Larkin Taxadjunct

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 25 percent

Elevation: 2,500 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Pachic Ultic Argixerolls

Typical Pedon

Larkin silt loam in an area of Larkin-Driscoll complex, 12 to 25 percent slopes, northwest of Plummer, Idaho, near Rose Road and Rose Creek; about 995 feet south and 165 feet east of the northwest corner of section 4, T. 46 N., R. 5 W.; latitude 47 degrees, 21 minutes, 48 seconds north and longitude 116 degrees, 58 minutes, 48 seconds west, NAD 83; UTM 501506 meters east, 5245542 meters north, zone 11.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate very fine and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine and fine tubular pores; moderately acid (pH 5.6); gradual smooth boundary.

AB—6 to 14 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many

very fine and fine and common medium tubular pores; moderately acid (pH 6.0); clear smooth boundary.

Bt1—14 to 22 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and common medium tubular pores; 10 percent patchy faint clay films in pores; slightly acid (pH 6.5); abrupt wavy boundary.

Bt2—22 to 28 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and common medium tubular pores; 15 percent patchy faint clay films on faces of peds and 10 percent patchy distinct clay films in pores; 15 percent prominent pale yellow (2.5Y 8/2) silt coatings on faces of peds; neutral (pH 7.0); gradual wavy boundary.

Bt3—28 to 39 inches; yellowish brown (10YR 5/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and common medium tubular pores; 15 percent patchy faint and distinct clay films on faces of peds and in pores; 15 percent prominent pale yellow (2.5Y 8/2) silt coatings on faces of peds; 1 percent gravel; neutral (pH 6.8); gradual wavy boundary.

Btc1—39 to 50 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse prismatic structure; hard, firm, moderately sticky and moderately plastic; common very fine and fine roots; many very fine and fine tubular pores; 20 percent patchy distinct clay films on faces of peds and 15 percent patchy faint clay films in pores; 25 percent prominent pale yellow (2.5Y 8/2) silt coatings on faces of peds; 1 percent very fine distinct iron-manganese masses; neutral (pH 7.0); clear wavy boundary.

Btc2—50 to 60 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 3/4) moist; weak medium and coarse prismatic structure; very hard, firm, moderately sticky and moderately plastic; many very fine and fine tubular pores; 25 percent patchy distinct clay films on faces of peds and 15 percent patchy faint clay films in pores; 25 percent prominent pale yellow (2.5Y 8/2) silt coatings on faces of peds; 2 percent very fine distinct iron-manganese masses; neutral (pH 7.0).

Taxadjunct Features

The Larkin soils in this survey area are considered a taxadjunct to the Larkin series because the mollic epipedon meets the criteria for the Pachic subgroup.

Latah Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Drainageways

Parent material: Loess

Slope range: 0 to 3 percent

Elevation: 2,500 to 2,700 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 49 degrees F

Frost-free period: 110 to 140 days

Taxonomic class: Fine, mixed, superactive, mesic Xeric Argialbolls

Typical Pedon

Latah silt loam in an area of Tilma-Latah complex, 0 to 8 percent slopes; about 4 miles south of Spangle, Washington; about 2,920 feet north and 2,370 feet west of the southeast corner of section 28, T. 22 N., R. 43 E.; latitude 49 degrees, 22 minutes, 10.70 seconds north and longitude 117 degrees, 22 minutes, 44.40 seconds west, NAD 83; UTM 472485 meters east, 5468617 meters north, zone 11.

- Ap—0 to 10 inches; dark grayish brown (10YR 4/2) silt loam, black (10YR 2/1) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; few fine tubular pores; moderately alkaline (pH 8.3); abrupt wavy boundary.
- A—10 to 14 inches; dark grayish brown (10YR 4/2) silt loam, black (10YR 2/1) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; few fine tubular pores; moderately alkaline (pH 7.9); abrupt wavy boundary.
- BA—14 to 19 inches; dark grayish brown (10YR 4/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many fine tubular pores; moderately alkaline (pH 8.2); clear wavy boundary.
- E—19 to 22 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine and fine roots; common fine tubular pores; moderately alkaline (pH 8.3); clear wavy boundary.
- Btgb1—22 to 31 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (2.5Y 3/2) moist; weak medium prismatic structure parting to moderate medium subangular blocky; moderately hard, firm, moderately sticky and moderately plastic; few very fine and fine roots; common very fine tubular pores; 55 percent continuous distinct clay films that are very dark grayish brown (10YR 3/2) when moist and are on faces of peds; 1 percent fine distinct iron-manganese concretions that are black (10YR 2/1) when moist; moderately alkaline (pH 8.2); clear wavy boundary.
- Btgb2—31 to 38 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (2.5Y 3/2) and olive brown (2.5Y 4/3) moist; moderate medium prismatic structure; hard, very firm, very sticky and very plastic; few very fine roots; few very fine tubular pores; 55 percent continuous distinct clay films that are very dark grayish brown (10YR 3/2) when moist and are on faces of peds; 10 percent fine prominent masses of oxidized iron that are dark yellowish brown (10YR 4/6) when moist; 1 percent fine distinct iron-manganese concretions that are black (10YR 2/1) when moist; moderately alkaline (pH 8.1); clear wavy boundary.
- Btb—38 to 60 inches; light yellowish brown (2.5Y 6/3) silty clay loam, olive (5Y 5/3) moist; moderate medium prismatic structure; hard, very firm, moderately sticky and very plastic; few very fine tubular pores; 55 percent continuous distinct clay films that are brown (10YR 5/3) when moist and are on faces of peds; 25 percent fine and medium prominent masses of oxidized iron that are dark yellowish brown (10YR 4/6) when moist; 1 percent fine prominent iron-manganese concretions that are black (10YR 2/1) when moist; slightly alkaline (pH 7.6).

Range in Characteristics

Depth to highest seasonal water table: 18 to 22 inches in December through April

Flooding: Occasional, very brief periods in December through May

Latahco Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills

Landform: Drainageways, low terraces

Parent material: Loess

Slope range: 0 to 3 percent

Elevation: 2,500 to 2,890 feet

Mean annual precipitation: 22 to 28 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 90 to 130 days

Taxonomic class: Fine-silty, mixed, superactive, frigid Argiaquic Xeric Argialbolls

Typical Pedon

Latahco silt loam in an area of Latahco-Lovell complex, 0 to 3 percent slopes, about 4 miles north of Tensed, Idaho, and about 300 feet west of Highway 95 at the intersection with Benewah Creek Road; about 1,540 feet north and 2,020 feet west of the southeast corner of section 27, T. 45 N., R. 5 W.; latitude 47 degrees, 12 minutes, 40 seconds north and longitude 116 degrees, 56 minutes, 48 seconds west, NAD 83; UTM 504359 meters east, 5228626 meters north, zone 11.

- Ap—0 to 8 inches; dark gray (10YR 4/1) silt loam, black (10YR 2/1) moist; weak thin platy structure parting to weak fine granular; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine irregular pores; slightly acid (pH 6.5); abrupt smooth boundary.
- A—8 to 13 inches; dark gray (10YR 4/1) silt loam, black (10YR 2/1) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine tubular pores; neutral (pH 6.6); clear irregular boundary.
- E1—13 to 17 inches; gray (10YR 5/1) silt loam, black (10YR 2/1) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine tubular pores; 50 percent distinct silt coatings on faces of peds; 1 percent fine distinct masses of manganese; neutral (pH 6.8); clear wavy boundary.
- E2—17 to 20 inches; gray (10YR 6/1) silt loam, very dark gray (10YR 3/1) moist; massive; soft, very friable, slightly sticky and slightly plastic; few fine roots; many very fine and fine tubular pores; 50 percent distinct silt coatings on faces of peds; 1 percent fine distinct masses of oxidized iron and 3 percent fine distinct masses of manganese; neutral (pH 7.0); abrupt wavy boundary.
- E/B—20 to 21 inches; 50 percent gray (10YR 6/1) silt loam, very dark gray (10YR 3/1) moist (E part); grayish brown (2.5Y 5/2) silt loam, dark grayish brown (2.5Y 4/2) moist (B part); weak medium subangular blocky structure; moderately hard, slightly firm, slightly sticky and slightly plastic; few fine roots; many very fine and fine tubular pores; 15 percent patchy prominent clay films on faces of peds and 15 percent discontinuous distinct clay films in pores; 20 percent continuous distinct silt coatings on faces of peds; 2 percent fine distinct masses of manganese; neutral (pH 7.0); clear wavy boundary.
- Bt—21 to 26 inches; grayish brown (2.5Y 5/2) and light brownish gray (2.5Y 6/2) silty clay loam, dark gray (2.5Y 4/1) and dark grayish brown (2.5Y 4/2) moist; moderate

medium prismatic structure parting to moderate medium angular blocky; very hard, firm, moderately sticky and moderately plastic; few fine roots; many very fine and fine tubular pores; 30 percent continuous distinct clay films that are very dark gray (10YR 3/1) when moist and are on faces of peds; 10 percent fine distinct masses of manganese; slightly alkaline (pH 7.4); clear smooth boundary.

Btk—26 to 32 inches; pale red (2.5YR 6/2) and weak red (2.5YR 5/2) silty clay loam, weak red (2.5YR 4/2) moist; moderate medium prismatic structure parting to moderate medium angular blocky; very hard, firm, moderately sticky and moderately plastic; few fine roots between peds; many very fine and fine tubular pores; 25 percent continuous distinct clay films that are very dark gray (10YR 3/1) when moist and are on faces of peds; 15 percent fine distinct masses of manganese; slightly effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

Btkc—32 to 42 inches; pale red (2.5YR 6/2) and weak red (2.5YR 5/2) silty clay loam, weak red (2.5YR 4/2) moist; moderate medium prismatic structure parting to moderate coarse angular blocky; very hard, firm, moderately sticky and moderately plastic; common fine and medium tubular pores; 25 percent continuous distinct clay films on faces of peds and 20 percent continuous distinct clay films in pores; 2 percent fine distinct iron-manganese concretions; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Btb—42 to 51 inches; pale red (2.5YR 6/2) silt loam, weak red (2.5YR 5/2) moist; weak very coarse prismatic structure; very hard, firm, moderately sticky and moderately plastic; few fine and medium tubular pores; 25 percent continuous faint clay films on faces of peds and 20 percent continuous distinct clay films in pores; 10 percent distinct masses of oxidized iron; slightly alkaline (pH 7.8); abrupt wavy boundary.

Cc—51 to 62 inches; pale red (2.5YR 7/2) silt loam, weak red (2.5YR 5/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium tubular pores; 25 percent fine and medium distinct yellowish brown (10YR 5/4 and 5/6) masses of oxidized iron; 25 percent fine and medium distinct iron-manganese concretions; moderately alkaline (pH 8.0).

Range in Characteristics

Depth to highest seasonal water table: 16 to 21 inches in March through April

Flooding: Occasional, brief periods in February through April

Latour Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over colluvium derived from metasedimentary rock

Slope range: 35 to 75 percent

Elevation: 4,400 to 5,000 feet

Mean annual precipitation: 40 to 45 inches

Mean annual air temperature: 38 to 42 degrees F

Frost-free period: 35 to 60 days

Taxonomic class: Medial-skeletal, glassy Typic Haplocryands

Typical Pedon

Latour gravelly medial silt loam, 35 to 75 percent slopes, about 6 miles north of St. Maries, Idaho; about 1,400 feet north and 100 feet east of the southwest corner of section 23, T. 47 N., R. 2 W.; latitude 47 degrees, 24 minutes, 14 seconds north and

Soil Survey of Benewah County Area, Idaho, Western Part

longitude 116 degrees, 33 minutes, 55 seconds west, NAD 83; UTM 532828 meters east, 5250122 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 3 inches; dark grayish brown (10YR 4/2) gravelly medial silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and few medium tubular pores; 10 percent gravel and 5 percent channers; moderately acid (pH 6.0); abrupt wavy boundary.

Bw1—3 to 8 inches; brown (10YR 4/3) gravelly medial silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 10 percent gravel, 5 percent channers, and 5 percent cobbles; moderately acid (pH 5.8); clear wavy boundary.

Bw2—8 to 14 inches; yellowish brown (10YR 5/4) very cobbly medial silt loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and common medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 10 percent gravel, 5 percent channers, 20 percent cobbles, 15 percent flagstones, and 5 percent stones; moderately acid (pH 5.8); clear wavy boundary.

Bw3—14 to 28 inches; light yellowish brown (10YR 6/4) very flaggy medial silt loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 5 percent gravel, 5 percent channers, 5 percent cobbles, 30 percent flagstones, and 10 percent stones; moderately acid (pH 6.0); gradual wavy boundary.

Bw4—28 to 40 inches; very pale brown (10YR 7/4) extremely cobbly medial silt loam, yellowish brown (10YR 5/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular and interstitial pores; 5 percent gravel, 5 percent channers, 45 percent cobbles, and 5 percent stones; moderately acid (pH 6.0); clear irregular boundary.

2C—40 to 60 inches; light yellowish brown (2.5Y 6/4) extremely stony sandy loam, olive brown (2.5Y 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine, common medium and coarse, and few very coarse interstitial pores; 20 percent gravel, 30 percent cobbles, 10 percent flagstones, and 15 percent stones; moderately acid (pH 5.9).

Range in Characteristics

Thickness of ash mantle: 20 to 40 inches

Depth to strongly contrasting textural stratification (Bw2 horizon): 12 to 25 inches

Libertybutte Series

Depth class: Shallow to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Soil Survey of Benewah County Area, Idaho, Western Part

Landform: Mountain slopes

Parent material: Loess over colluvium derived from metasedimentary rock

Slope range: 5 to 30 percent

Elevation: 2,850 to 3,700 feet

Mean annual precipitation: 20 to 25 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Loamy, mixed, superactive, mesic Lithic Argixerolls

Typical Pedon

Libertybutte gravelly silt loam in an area of Libertybutte-Tekoa complex, 5 to 30 percent slopes, about 5 miles west of DeSmet, Idaho, on the south flank of Liberty Butte; about 600 feet north and 1,200 feet west of the southeast corner of section 7, T. 44 N., R. 5 W.; latitude 47 degrees, 9 minutes, 56.20 seconds north and longitude 117 degrees, 0 minutes, 25.00 seconds west, NAD 83; UTM 499474 meters east, 5223562 meters north, zone 11.

A—0 to 4 inches; dark grayish brown (10YR 4/2) gravelly silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to weak fine granular; soft, friable, nonsticky and nonplastic; many very fine and fine roots; common very fine and fine interstitial pores; 25 percent gravel; slightly acid (pH 6.4); clear smooth boundary.

Bt1—4 to 11 inches; brown (10YR 4/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; 35 percent discontinuous faint clay films on faces of peds; 25 percent gravel; neutral (pH 6.6); clear smooth boundary.

Bt2—11 to 16 inches; brown (10YR 4/3) very gravelly silt loam, very dark grayish olive (10Y 3/2) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; 35 percent continuous distinct clay films on faces of peds; 25 percent gravel and 10 percent channers; neutral (pH 6.8); abrupt smooth boundary.

Crt—16 to 19 inches; moderately cemented metasedimentary rock; 15 percent clay films on rock fragments; gradual wavy boundary.

R—19 to 29 inches; indurated metasedimentary rock.

Range in Characteristics

Depth to lithic bedrock: 14 to 20 inches

Lotuspoint Series

Depth class: Moderately deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over material derived from quartzite

Slope range: 5 to 75 percent

Elevation: 2,080 to 4,840 feet

Mean annual precipitation: 26 to 40 inches

Mean annual air temperature: 42 to 50 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, isotic, mesic Andic Haploxerepts

Typical Pedon

Lotuspoint stony ashy silt loam, 35 to 65 percent slopes, stony, southeast of Plummer, Idaho; about 1,450 feet south and 1,450 feet east of the northwest corner of section 21, T. 46 N., R. 3 W.; latitude 47 degrees, 19 minutes, 19.20 seconds north and longitude 116 degrees, 43 minutes, 47.30 seconds west, NAD 83; UTM 520437 meters east, 5240962 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; dark grayish brown (10YR 4/2) stony ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 15 percent gravel, 5 percent cobbles, and 5 percent stones; slightly acid (pH 6.5); abrupt wavy boundary.

AB—4 to 10 inches; brown (10YR 4/3) stony ashy silt loam, dark brown (7.5YR 3/2) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel, 5 percent cobbles, and 15 percent stones; moderately acid (pH 6.0); clear wavy boundary.

2Bw1—10 to 16 inches; light yellowish brown (10YR 6/4) extremely stony silt loam, brown (7.5YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 5 percent gravel, 25 percent cobbles, and 50 percent stones; moderately acid (pH 6.0); clear wavy boundary.

2Bw2—16 to 26 inches; light yellowish brown (10YR 6/4) extremely stony loam, brown (7.5YR 4/4) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 2 percent faint clay films in pores; 5 percent gravel, 30 percent cobbles, and 50 percent stones; moderately acid (pH 6.0); abrupt irregular boundary.

2R—26 to 36 inches; indurated quartzite; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 20 to 40 inches

Thickness of ash mantle: 7 to 14 inches

Lovell Series

Depth class: Very deep

Drainage class: Poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills, basalt plateaus

Landform: Drainageways, flood plains

Parent material: Volcanic ash and loess over alluvium

Slope range: 0 to 3 percent

Elevation: 2,150 to 3,020 feet

Mean annual precipitation: 22 to 30 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-silty, isotic, frigid Aquandic Epiaqualfs

Typical Pedon

Lovell ashy silt loam in an area of Latahco-Lovell complex, 0 to 3 percent slopes, about 1.5 miles northwest of Tensed, Idaho; about 600 feet north and 45 feet east of the center of section 10, T. 44 N., R. 5 W.; latitude 47 degrees, 9 minutes, 47.30 seconds north and longitude 116 degrees, 56 minutes, 45.40 seconds west, NAD 83; UTM 503950 meters east, 5224352 meters north, zone 11.

- Ap—0 to 8 inches; light brownish gray (10YR 6/2) ashy silt loam, very dark brown (10YR 2/2) moist; weak medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many fine interstitial pores; moderately acid (pH 6.0); abrupt smooth boundary.
- Eg1—8 to 14 inches; gray (10YR 6/1) ashy silt loam, very dark brown (10YR 2/2) moist; weak medium platy structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine tubular pores; 3 percent fine distinct black (10YR 2/1) iron-manganese concretions; slightly acid (pH 6.4); clear smooth boundary.
- Eg2—14 to 18 inches; gray (10YR 6/1) ashy silt loam, very dark gray (10YR 3/1) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many fine tubular pores; 3 percent fine distinct black (10YR 2/1) iron-manganese concretions; slightly acid (pH 6.5); abrupt smooth boundary.
- EBtg—18 to 22 inches; gray (10YR 6/1) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium platy structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine tubular pores; 3 percent distinct very dark brown (10YR 2/2) clay films on faces of peds; 5 percent fine distinct black (10YR 2/1) iron-manganese concretions; neutral (pH 6.7); abrupt smooth boundary.
- Bt1—22 to 26 inches; light gray (10YR 7/2) silt loam, dark grayish brown (10YR 4/2) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; many very fine and fine tubular pores; 10 percent continuous distinct clay films that are very dark brown (10YR 2/2) when moist and are on faces of peds and 5 percent distinct clay films in pores; neutral (pH 7.0); abrupt smooth boundary.
- Bt2—26 to 34 inches; light gray (10YR 7/2) silt loam, dark grayish brown (10YR 4/2) moist; weak thin and medium platy structure; hard, firm, slightly sticky and slightly plastic; many fine tubular pores; 25 percent continuous distinct clay films that are very dark brown (10YR 2/2) when moist and are on faces of peds and 5 percent distinct clay films in pores; neutral (pH 7.0); clear smooth boundary.
- 2Bt3—34 to 37 inches; light gray (10YR 7/2) loam, dark grayish brown (10YR 4/2) moist; weak thin platy structure; hard, firm, slightly sticky and slightly plastic; common very fine tubular pores; 25 percent continuous distinct clay films that are very dark grayish brown (10YR 3/2) moist and are on faces of peds and 5 percent distinct clay films in pores; neutral (pH 7.0); clear smooth boundary.
- 2Bt4—37 to 44 inches; light yellowish brown (10YR 6/4) loam, dark yellowish brown (10YR 4/4) moist; weak thin platy structure; slightly hard, firm, slightly sticky and slightly plastic; common very fine tubular pores; 20 percent continuous distinct clay films that are very dark gray (10YR 3/1) when moist and are on faces of peds and 5 percent distinct clay films in pores; neutral (pH 6.7); clear smooth boundary.
- 2Bt5—44 to 51 inches; very pale brown (10YR 7/3) loam, brown (10YR 4/3) moist; weak thin platy structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine tubular pores; 15 percent continuous distinct clay films in pores; 5 percent medium and coarse prominent reddish brown (5YR 5/4) masses of oxidized iron; neutral (pH 6.8); abrupt smooth boundary.
- 2BC—51 to 60 inches; light gray (10YR 7/2) loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine

tubular pores; 20 percent coarse prominent reddish brown (5YR 5/4) and yellowish red (5YR 5/6) masses of oxidized iron; 5 percent fine prominent black (10YR 2/1) iron-manganese concretions; neutral (pH 6.9).

Range in Characteristics

Depth to highest seasonal water table: 8 to 26 inches in January through June

Flooding: Occasional, brief periods in January through April

McCrosket Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 15 to 65 percent

Elevation: 2,600 to 4,000 feet

Mean annual precipitation: 20 to 35 inches

Mean annual air temperature: 42 to 49 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxerolls

Typical Pedon

McCrosket gravelly ashy silt loam in an area of Ardenvoir-McCrosket association, 35 to 65 percent slopes, about 0.5 mile northwest of Windfall Pass summit; about 1,900 feet south and 2,000 feet west of the northeast corner of section 16, T. 45 N., R. 4 W.; latitude 47 degrees, 14 minutes, 43 seconds north and longitude 116 degrees, 50 minutes, 26 seconds west, NAD 83; UTM 512079 meters east, 5232429 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A1—2 to 5 inches; dark grayish brown (10YR 4/2) gravelly ashy silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and common medium tubular pores; 25 percent gravel; slightly acid (pH 6.5); gradual wavy boundary.

A2—5 to 12 inches; brown (10YR 5/3) gravelly ashy silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and common medium tubular pores; 30 percent gravel; neutral (pH 6.8); clear wavy boundary.

Bw1—12 to 20 inches; light brown (7.5YR 6/3) very cobbly silt loam, brown (7.5YR 4/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and few fine and medium tubular pores; 5 percent patchy faint clay films on faces of peds; 25 percent gravel and 30 percent cobbles; moderately acid (pH 6.0); gradual wavy boundary.

Bw2—20 to 32 inches; light brown (7.5YR 6/3) very cobbly silt loam, brown (7.5YR 4/3) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and few fine and medium tubular pores; 5 percent

discontinuous faint clay films on faces of peds; 20 percent gravel and 35 percent cobbles; moderately acid (pH 5.7); gradual wavy boundary.

BC—32 to 42 inches; pink (7.5YR 7/3) extremely cobbly loam, brown (7.5YR 5/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; common very fine and few fine tubular pores; 15 percent gravel and 45 percent cobbles; moderately acid (pH 5.9); abrupt wavy boundary.

Cr—42 to 52 inches; moderately cemented metasedimentary rock.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Miesen Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Flood plains

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 4 percent

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Coarse-silty, mixed, superactive, frigid Vitrandic Humudepts

Typical Pedon

Miesen ashy silt loam, 0 to 2 percent slopes, about 3 miles west of St. Joe, Idaho; about 200 feet north and 100 feet east of the southwest corner of section 13, T. 46 N., R. 1 W.; latitude 47 degrees, 19 minutes, 37.70 seconds north and longitude 116 degrees, 24 minutes, 52.65 seconds west, NAD 83; UTM 544231 meters east, 5241687 meters north, zone 11.

A1—0 to 12 inches; grayish brown (10YR 5/2) ashy silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine and fine and few medium tubular and irregular pores; strongly acid (pH 5.3); clear wavy boundary.

A2—12 to 26 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; many very fine and fine and common medium tubular and irregular pores; strongly acid (pH 5.3); clear wavy boundary.

A3—26 to 32 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine and fine tubular and irregular pores; strongly acid (pH 5.4); gradual wavy boundary.

Bw1—32 to 41 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine and fine tubular pores; 1 percent fine faint dark yellowish brown (10YR 4/4) masses of oxidized iron; 10 percent fine mica flakes; strongly acid (pH 5.5); clear wavy boundary.

Bw2—41 to 45 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 3/3) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 10 percent fine mica flakes; moderately acid (pH 5.7); clear wavy boundary.

Bw3—45 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine and fine tubular pores; 10 percent fine and medium distinct very dark grayish brown (10YR 3/2), dark grayish brown (10YR 4/2), and dark yellowish brown (10YR 4/4) masses of oxidized iron; 10 percent fine mica flakes; moderately acid (pH 5.6).

Range in Characteristics

Depth to highest seasonal water table: 24 to 50 inches in November through June

Depth to highest seasonal water table (protected, drained areas): 24 to 40 inches in November through May

Flooding: Occasional, brief periods in February through May

Flooding (protected, drained areas): Occasional, very brief periods in February through May

Minaloosa Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills; mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 25 to 60 percent

Elevation: 2,720 to 3,720 feet

Mean annual precipitation: 23 to 37 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 95 to 130 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts

Typical Pedon

Minaloosa ashy silt loam in an area of Arson-Minaloosa complex, 25 to 60 percent slopes; about 1,475 feet north and 1,870 feet west of the southeast corner of section 18, T. 43 N., R. 4 W.; latitude 47 degrees, 3 minutes, 56.40 seconds north and longitude 116 degrees, 53 minutes, 6.60 seconds west, NAD 83; UTM 508720 meters east, 5212467 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 5 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; moderate very fine and fine granular structure; slightly hard, very friable, nonsticky and slightly plastic; common very fine and few medium roots; common very fine irregular pores; 10 percent gravel; slightly acid (pH 6.1); abrupt wavy boundary.

AB—5 to 10 inches; yellowish brown (10YR 5/4) gravelly ashy silt loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and slightly plastic; common very fine and few fine and medium roots; common very fine irregular pores; 15 percent gravel; slightly acid (pH 6.1); clear wavy boundary.

- Bw—10 to 26 inches; light yellowish brown (10YR 6/4) very gravelly silt loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and few fine and medium roots; common very fine tubular and irregular pores; 5 percent faint silt coatings in pores; 30 percent gravel and 5 percent cobbles; slightly acid (pH 6.1); clear wavy boundary.
- Bt—26 to 32 inches; light yellowish brown (10YR 6/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and few fine roots around fragments; common very fine tubular and irregular pores; 2 percent faint clay films in pores; 10 percent faint silica coatings on faces of peds; 10 percent faint silt coatings in pores; 50 percent gravel; moderately acid (pH 5.8); clear wavy boundary.
- BCt—32 to 41 inches; very pale brown (10YR 7/4) extremely gravelly loam, yellowish brown (10YR 5/4) moist; weak fine and medium subangular blocky structure; soft, friable, slightly sticky and moderately plastic; few very fine and fine roots around fragments; common very fine irregular pores; 8 percent faint clay films in pores; 55 percent gravel and 5 percent cobbles; moderately acid (pH 5.9); clear wavy boundary.
- C—41 to 60 inches; very pale brown (10YR 7/3) extremely gravelly loam, yellowish brown (10YR 5/4) moist; massive; loose, slightly sticky and moderately plastic; few very fine roots around fragments; common very fine irregular pores; 50 percent gravel and 20 percent cobbles; moderately acid (pH 5.7).

Range in Characteristics

Depth to strongly contrasting textural stratification (Bw horizon): 10 to 20 inches

Naff Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 40 percent

Elevation: 2,500 to 2,900 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Typic Argixerolls

Typical Pedon

Naff silt loam in an area of Naff-Garfield complex, 5 to 25 percent slopes, about 5.7 miles southeast of Fairfield, Washington; about 800 feet south and 85 feet west of the northeast corner of section 2, T. 21 N., R. 45 E.; latitude 47 degrees, 20 minutes, 43.08 seconds north and longitude 117 degrees, 4 minutes, 2.57 seconds west, NAD 83; UTM 494910 meters east, 5243539 meters north, zone 11.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak thick platy structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine and fine tubular pores; neutral (pH 6.6); abrupt smooth boundary.

- A—8 to 17 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse prismatic structure parting to moderate fine granular; hard, friable, slightly sticky and moderately plastic; many very fine and fine roots; many very fine tubular pores; slightly acid (pH 6.4); clear wavy boundary.
- BA—17 to 26 inches; brown (10YR 5/3) silt loam, brown (10YR 4/3) moist; moderate fine prismatic structure; hard, firm, moderately sticky and moderately plastic; many very fine and fine roots; many very fine tubular pores; 15 percent discontinuous faint clay films that are dark brown (10YR 3/3) when moist and are on faces of peds; 15 percent patchy distinct silt coatings on faces of peds; 10 percent patchy distinct sand coatings on faces of peds; neutral (pH 6.6); gradual wavy boundary.
- Bt1—26 to 61 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate fine angular blocky; very hard, firm, very sticky and very plastic; common fine roots; many very fine tubular pores; 35 percent discontinuous faint clay films that are dark brown (10YR 3/3) when moist and are on faces of peds; 15 percent patchy faint silt coatings on faces of peds; 10 percent fine distinct iron-manganese concretions and 10 percent distinct irregular manganese coatings; neutral (pH 6.8); gradual wavy boundary.
- Bt2—61 to 80 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 5/3) moist; moderate medium prismatic structure parting to moderate fine angular blocky; hard, firm, moderately sticky and moderately plastic; few fine roots; many very fine tubular pores; 70 percent continuous distinct clay films that are dark yellowish brown (10YR 3/4) when moist and are on faces of peds; 35 percent discontinuous distinct silt coatings on faces of peds; 10 percent fine distinct iron-manganese concretions and 10 percent distinct irregular manganese coatings; neutral (pH 6.8).

Palouse Series

Depth class: Very deep ([fig. 17](#))

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 25 percent

Elevation: 2,500 to 2,900 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Pachic Ultic Haploxerolls

Typical Pedon

Palouse silt loam in an area of Palouse-Naff complex, 3 to 8 percent slopes; about 790 feet north and 1,500 feet east of the southwest corner of section 21, T. 45 N., R. 5 W.; latitude 47 degrees, 13 minutes, 24.53 seconds north and longitude 116 degrees, 58 minutes, 30.37 seconds west, NAD 83; UTM 501885 meters east, 5229999 meters north, zone 11.

- Ap1—0 to 7 inches; dark gray (10YR 4/1) silt loam, black (10YR 2/1) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine roots; many very fine and fine and few medium tubular pores; moderately acid (pH 6.0); clear smooth boundary.



Figure 17.—Typical profile of Palouse silt loam in an area of Thatuna-Naff complex, 8 to 25 percent slopes. The Palouse soil is a minor component in this map unit. Numbers on tape indicate centimeters.

- Ap2—7 to 11 inches; dark gray (10YR 4/1) silt loam, black (10YR 2/1) moist; weak thick and very thick platy structure parting to weak fine and medium granular; moderately hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine and fine and few medium tubular pores; moderately acid (pH 5.8); clear smooth boundary.
- A—11 to 18 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate medium and coarse subangular blocky structure parting to weak fine and medium angular blocky; moderately hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine and fine and few medium and coarse tubular pores; slightly acid (pH 6.5); clear smooth boundary.
- AB—18 to 22 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine and medium prismatic structure parting to weak fine and medium angular blocky; hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine and fine and few medium and coarse tubular pores; neutral (pH 6.6); clear smooth boundary.
- Bw—22 to 26 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium prismatic structure parting to weak fine and

medium subangular blocky; hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine, fine, and medium and few coarse and very coarse tubular pores; neutral (pH 6.6); clear smooth boundary.

Bt1—26 to 35 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine and medium prismatic structure parting to moderate fine subangular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium, coarse, and very coarse tubular pores; 5 percent patchy faint clay films on faces of peds and 5 percent discontinuous faint clay films in pores; 10 percent discontinuous distinct silt coatings on faces of peds; 1 percent fine distinct iron-manganese concretions; neutral (pH 6.8); clear smooth boundary.

Bt2—35 to 50 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak medium prismatic structure parting to moderate fine subangular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium, coarse, and very coarse tubular pores; 5 percent patchy faint clay films on faces of peds and 5 percent discontinuous faint clay films in pores; 10 percent discontinuous distinct silt coatings on faces of peds; 2 percent fine distinct iron-manganese concretions; neutral (pH 7.0); gradual smooth boundary.

Bt3—50 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine and medium prismatic structure parting to weak fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine and few medium, coarse, and very coarse tubular pores; 10 percent patchy faint clay films on faces of peds and 5 percent discontinuous faint clay films in pores; 10 percent discontinuous distinct silt coatings on faces of peds; 2 percent fine distinct iron-manganese concretions; slightly alkaline (pH 7.8).

Pedee Series

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Landscape: Foothills

Landform: Hills

Parent material: Volcanic ash and loess over alluvium and colluvium derived from metasedimentary rock

Slope range: 3 to 35 percent

Elevation: 2,580 to 3,180 feet

Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 125 days

Taxonomic class: Clayey-skeletal, isotic, frigid Vitrandic Palexeralfs

Typical Pedon

Pedee ashy silt loam in an area of Tensed-Pedee complex, 3 to 15 percent slopes (fig. 18); about 4 miles east of Tensed, Idaho, about 875 feet south and 125 feet west of the northeast corner of section 16, T. 44 N., R. 4 W.; latitude 47 degrees, 9 minutes, 39 seconds north and longitude 116 degrees, 49 minutes, 58 seconds west, NAD 83; UTM 512678 meters east, 5223058 meters north, zone 11.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark brown (10YR 2/2) moist; weak thin platy structure parting to moderate very fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine,



Figure 18.—Typical profile of Pedee ashy silt loam in an area of Tensed-Pedee complex, 3 to 15 percent slopes. Numbers on tape indicate centimeters.

and medium and common coarse and very coarse roots; many very fine and fine interstitial pores; 10 percent gravel; moderately acid (pH 5.9); clear wavy boundary.

- A2—3 to 10 inches; dark grayish brown (10YR 4/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine, and medium and common coarse and very coarse roots; many very fine and fine interstitial pores; 14 percent gravel; moderately acid (pH 5.7); clear wavy boundary.
- Bt—10 to 19 inches; brown (10YR 5/3) gravelly silt loam, brown (10YR 4/3) moist; weak medium prismatic structure parting to moderate medium subangular blocky; hard, friable, slightly sticky and slightly plastic; many very fine and fine interstitial pores; 6 percent faint clay films on faces of peds and 4 percent faint clay films in pores; 30 percent gravel; strongly acid (pH 5.5); abrupt wavy boundary.
- E—19 to 22 inches; very pale brown (10YR 7/3) very gravelly silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine interstitial pores; 36 percent gravel; strongly acid (pH 5.5); abrupt wavy boundary.

- 2Bt1—22 to 31 inches; brown (7.5YR 5/4) very gravelly clay, brown (7.5YR 4/4) moist; moderate coarse columnar structure parting to moderate coarse angular blocky; extremely hard, very firm, very sticky and very plastic; few very fine and fine roots; few very fine tubular pores; 45 percent prominent clay films on faces of peds; 40 percent gravel; very strongly acid (pH 4.8); clear wavy boundary.
- 2Bt2—31 to 41 inches; reddish brown (5YR 4/4) very gravelly loam, yellowish red (5YR 5/6) moist; massive; extremely hard, very firm, very sticky and very plastic; few very fine and fine roots; many very fine and fine tubular pores; 20 percent distinct clay films on faces of peds and 10 percent distinct clay films between sand grains; 40 percent gravel; strongly acid (pH 5.4); clear wavy boundary.
- 2Bt3—41 to 60 inches; pink (7.5YR 7/4) extremely gravelly loam, brown (7.5YR 5/4) moist; massive; extremely hard, extremely firm, very sticky and very plastic; few very fine and fine roots; many very fine and fine tubular pores; 20 percent distinct clay films on faces of peds and 10 percent distinct clay films between sand grains; 65 percent gravel; neutral (pH 6.7).

Range in Characteristics

Depth to highest seasonal water table: 21 to 24 inches in February through April

Depth to strongly contrasting textural stratification (2Bt horizon): 22 to 35 inches

Pinecreek Series

Depth class: Very deep ([fig. 19](#))

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Volcanic ash over colluvium derived from quartzite

Slope range: 35 to 75 percent

Elevation: 2,400 to 4,600 feet

Mean annual precipitation: 26 to 40 inches

Mean annual air temperature: 42 to 49 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Ashy over loamy-skeletal, glassy over isotic, frigid Humic Vitrixerands

Typical Pedon

Pinecreek gravelly ashy silt loam, moist, 35 to 65 percent slopes, southwest of St. Maries, Idaho; about 50 feet north and 1,670 feet east of the southwest corner of section 32, T. 46 N., R. 2 W.; latitude 47 degrees, 16 minutes, 58 seconds north and longitude 116 degrees, 37 minutes, 20 seconds west, NAD 83; UTM 528586 meters east, 5236699 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A1—2 to 6 inches; brown (10YR 4/3) gravelly ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; 25 percent gravel; neutral (pH 6.6); abrupt wavy boundary.

A2—6 to 12 inches; brown (10YR 5/3) gravelly ashy silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few



Figure 19.—Typical profile of a Pinecreek gravelly ash silt loam. Numbers on tape indicate centimeters.

coarse roots; many very fine and fine tubular pores; 30 percent gravel; neutral (pH 6.6); clear wavy boundary.

Bw1—12 to 19 inches; light yellowish brown (10YR 6/4) gravelly ash silt loam, dark yellowish brown (10YR 3/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 20 percent gravel and 10 percent channers; slightly acid (pH 6.5); gradual wavy boundary.

Bw2—19 to 24 inches; light yellowish brown (10YR 6/4) gravelly ash silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 25 percent gravel and 5 percent channers; slightly acid (pH 6.2); abrupt wavy boundary.

2Bw3—24 to 30 inches; very pale brown (10YR 7/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure;

slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular pores; 45 percent gravel; moderately acid (pH 6.0); gradual wavy boundary.

2C1—30 to 39 inches; light yellowish brown (10YR 6/4) extremely flaggy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and common medium tubular pores; 35 percent gravel and 30 percent flagstones; moderately acid (pH 6.0); gradual wavy boundary.

2C2—39 to 59 inches; very pale brown (10YR 7/4) extremely cobbly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular pores; 35 percent gravel, 30 percent cobbles, and 5 percent stones; moderately acid (pH 5.7); gradual wavy boundary.

2C3—59 to 70 inches; very pale brown (10YR 7/4) extremely gravelly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular pores; 55 percent gravel and 10 percent cobbles; strongly acid (pH 5.5).

Range in Characteristics

Thickness of ash mantle: 14 to 22 inches

Depth to strongly contrasting textural stratification (2Bw3 horizon): 25 to 35 inches

Porrett Series

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Hills

Landform: Drainageways, flood plains

Parent material: Volcanic ash over loess

Slope range: 0 to 2 percent

Elevation: 2,150 to 3,260 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Fine-silty, mixed, active, frigid Aquandic Epiaqualfs

Typical Pedon

Porrett ashy silt loam in an area of Lovell-Porrett complex, 0 to 2 percent slopes (fig. 20), about 100 feet southwest of the old Benewah schoolhouse, along Benewah Creek; about 1,450 feet north and 1,185 feet east of the southwest corner of section 24, T. 45 N., R. 4 W.; latitude 47 degrees, 13 minutes, 31.20 seconds north and longitude 116 degrees, 47 minutes, 5.50 seconds west, NAD 83; UTM 516319 meters east, 5230234 meters north, zone 11.

Ap—0 to 3 inches; gray (10YR 6/1) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak thin platy structure parting to moderate very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine irregular pores; 1 percent fine faint masses of oxidized iron; moderately acid (pH 5.8); abrupt smooth boundary.

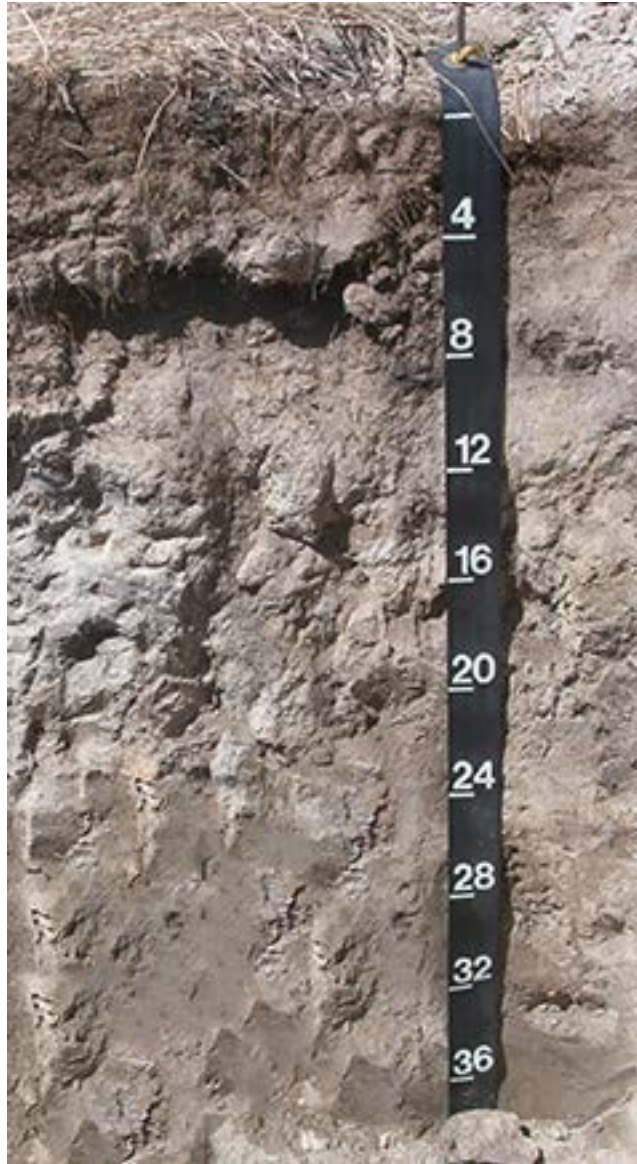


Figure 20.—Typical profile of Porrett ashy silt loam in an area of Lovell-Porrett complex, 0 to 2 percent slopes. Numbers on tape indicate centimeters.

- E1—3 to 9 inches; light gray (10YR 7/2) ashy silt loam, brown (10YR 5/3) moist; moderate thin and medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine tubular pores; 15 percent medium distinct light yellowish brown (10YR 6/4) masses of oxidized iron; 25 percent medium prominent strong brown (7.5YR 5/6) manganese concretions; very strongly acid (pH 4.8); abrupt smooth boundary.
- E2—9 to 14 inches; light gray (10YR 7/2) ashy silt loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine tubular pores; 15 percent medium distinct light yellowish brown (10YR 6/4) masses of oxidized iron; 25 percent medium prominent strong brown (7.5YR 5/6) manganese concretions; moderately acid (pH 5.6); abrupt smooth boundary.

- E3—14 to 17 inches; light gray (10YR 7/1) silt loam, grayish brown (2.5Y 5/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and fine and few coarse tubular pores; 15 percent medium distinct light yellowish brown (10YR 6/4) masses of oxidized iron; 25 percent medium prominent strong brown (7.5YR 5/6) manganese concretions; moderately acid (pH 6.0); abrupt smooth boundary.
- E4—17 to 21 inches; light gray (10YR 7/1) silt loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and fine tubular pores; 15 percent medium distinct light yellowish brown (10YR 6/4) masses of oxidized iron; 25 percent medium prominent strong brown (7.5YR 5/6) manganese concretions; moderately acid (pH 5.9); abrupt smooth boundary.
- Btg—21 to 23 inches; light gray (2.5Y 7/2) silty clay loam, grayish brown (10YR 5/2) moist; moderate very coarse prismatic structure parting to weak coarse angular blocky; very hard, firm, moderately sticky and moderately plastic; few very fine and fine roots between peds; many very fine and fine tubular pores; 35 percent prominent very dark gray (10YR 3/1) clay films on vertical faces of peds and 20 percent prominent clay films in pores; 15 percent medium prominent light yellowish brown (10YR 6/4) masses of oxidized iron; 25 percent medium and coarse prominent strong brown (7.5YR 5/6) manganese concretions; slightly acid (pH 6.2); abrupt smooth boundary.
- Bt1—23 to 36 inches; light gray (10YR 7/2) silty clay loam, olive brown (2.5Y 4/3) moist; moderate very coarse prismatic structure parting to weak coarse angular blocky; very hard, firm, moderately sticky and moderately plastic; few very fine and fine roots between peds; many very fine and fine tubular pores; 35 percent prominent very dark gray (10YR 3/1) clay films on vertical faces of peds and 20 percent prominent clay films in pores; 30 percent medium prominent dark yellowish brown (10YR 4/4) masses of oxidized iron; 25 percent medium and coarse prominent strong brown (7.5YR 5/6) manganese concretions; neutral (pH 6.6); clear smooth boundary.
- Bt2—36 to 60 inches; light brownish gray (10YR 6/2) silty clay loam, light olive brown (2.5Y 5/3) moist; moderate very coarse prismatic structure; very hard, firm, moderately sticky and very plastic; many very fine and fine and few medium tubular pores; 35 percent prominent very dark gray (10YR 3/1) clay films on vertical faces of peds and 20 percent prominent clay films in pores; 30 percent medium prominent dark yellowish brown (10YR 4/4) masses of oxidized iron; 25 percent medium and coarse prominent strong brown (7.5YR 5/6) manganese concretions; neutral (pH 6.6).

Range in Characteristics

Depth to highest seasonal water table: At the surface to a depth of 12 inches in December through June

Flooding: Frequent, long periods in December through May

Pywell Series

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Depressions, flood plains

Parent material: Herbaceous organic material over woody organic material

Slope range: 0 to 1 percent

Elevation: 2,120 to 2,140 feet

Soil Survey of Benewah County Area, Idaho, Western Part

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Euic, frigid Typic Haplosaprists

Typical Pedon

Pywell muck, protected, drained, 0 to 1 percent slopes, near the east end of the runway at St. Maries Airport; about 930 feet west and 805 feet south of the northeast corner of section 22, T. 46 N., R. 2 W.; latitude 47 degrees, 19 minutes, 26 seconds north and longitude 116 degrees, 34 minutes, 11 seconds west, NAD 83; UTM 532520 meters east, 5241251 meters north, zone 11.

Oa1—0 to 12 inches; dark brown (7.5YR 3/2) and dark reddish brown (5YR 2/2) muck; about 25 percent fiber, 5 percent rubbed; moderate medium subangular blocky structure parting to strong medium granular; many fine and medium roots; very strongly acid (pH 5.0); abrupt wavy boundary.

Oa2—12 to 16 inches; very dark grayish brown (10YR 3/2) and grayish brown (2.5Y 5/2) muck; about 15 percent fiber, 5 percent rubbed; weak medium prismatic structure; many fine and medium roots; very strongly acid (pH 4.6); abrupt wavy boundary.

Oa3—16 to 47 inches; black (5YR 2/1) and dark reddish brown (5YR 2/2) muck; about 15 percent fiber, 5 percent rubbed; weak medium prismatic structure; very strongly acid (pH 4.8); abrupt wavy boundary.

Oa4—47 to 65 inches; grayish brown (2.5Y 5/2) muck; about 20 percent fiber, 5 percent rubbed; massive; very strongly acid (pH 4.8).

Range in Characteristics

Depth to highest seasonal water table: At the surface to a depth of 25 inches throughout the year

Depth to highest seasonal water table (protected, drained areas): At the surface to a depth of 12 inches in January through May

Flooding: Frequent, very long periods in December through June

Flooding (protected, drained areas): Occasional, brief periods in December through June

Ponding: Frequent, very long periods in December through June

Ramsdell Series

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Flood plains

Parent material: Volcanic ash over silty alluvium

Slope range: 0 to 2 percent

Elevation: 2,120 to 2,150 feet

Mean annual precipitation: 26 to 30 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Coarse-silty, mixed, superactive, nonacid, frigid Aquandic Endoaquepts

Typical Pedon

Ramsdell ashy silt loam in an area of Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes, about 1.5 miles west of St. Maries, Idaho; about 700 feet south and 2,100 feet west of the northeast corner of section 20, T. 46 N., R. 2 W.; latitude 47 degrees, 19 minutes, 27 seconds north and longitude 116 degrees, 36 minutes, 59 seconds west, NAD 83; UTM 528993 meters east, 5241265 meters north, zone 11.

Ap—0 to 8 inches; light gray (2.5Y 7/2) ashy silt loam, grayish brown (2.5Y 5/2) moist; moderate fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; common very fine tubular pores; moderately acid (pH 6.0); abrupt wavy boundary.

Bg1—8 to 15 inches; light gray (2.5Y 7/2) very fine sandy loam, grayish brown (2.5Y 5/2) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and medium tubular pores; 25 percent medium prominent masses of oxidized iron that are brown (7.5YR 5/4) when moist; slightly acid (pH 6.4); abrupt wavy boundary.

Bg2—15 to 26 inches; light gray (10YR 7/1) silt loam, grayish brown (10YR 5/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many fine and common medium tubular pores; 30 percent medium prominent masses of oxidized iron that are strong brown (7.5YR 5/6) when moist; moderately acid (pH 6.0); abrupt wavy boundary.

Bg3—26 to 35 inches; light gray (10YR 7/1) silt loam, grayish brown (10YR 5/2) moist; moderate coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and common medium tubular pores; 30 percent medium prominent masses of oxidized iron that are reddish yellow (7.5YR 6/6) when moist; moderately acid (pH 5.8); abrupt wavy boundary.

Cg—35 to 60 inches; light gray (10YR 7/1) silt loam, grayish brown (10YR 5/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium tubular pores; 30 percent medium and coarse prominent masses of oxidized iron that are reddish yellow (7.5YR 6/6) when moist; moderately acid (pH 6.0).

Range in Characteristics

Depth to highest seasonal water table: At the surface to a depth of 24 inches in February through June

Depth to highest seasonal water table (protected, drained areas): 4 to 24 inches in February through May

Flooding: Frequent, long periods in February through June

Flooding (protected, drained areas): Occasional, brief periods in February through June

Rasser Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Soil Survey of Benewah County Area, Idaho, Western Part

Parent material: Volcanic ash and loess over alluvium and colluvium derived from metasedimentary rock

Slope range: 5 to 65 percent

Elevation: 2,640 to 3,700 feet

Mean annual precipitation: 25 to 30 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Haploxeralfs

Typical Pedon

Rasser ashy silt loam in an area of Benewah-Rasser complex, 15 to 35 percent slopes; about 1,100 feet south and 1,900 feet west of the northeast corner of section 25, T. 45 N., R. 4 W.; latitude 47 degrees, 13 minutes, 10.35 seconds north and longitude 116 degrees, 46 minutes, 33.75 seconds west, NAD 83; UTM 516956 meters east, 5229586 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; slightly acid (pH 6.5); abrupt wavy boundary.

BA—4 to 11 inches; light brown (7.5YR 6/3) ashy silt loam, brown (7.5YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 5 percent gravel; very strongly acid (pH 5.0); clear wavy boundary.

Bt1—11 to 20 inches; pink (7.5YR 7/3) very cobbly silt loam, brown (7.5YR 5/3) moist; weak medium subangular blocky structure and weak coarse subangular blocky; hard, firm, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 15 percent faint clay films on faces of peds and in pores; 20 percent gravel and 15 percent cobbles; very strongly acid (pH 5.0); gradual wavy boundary.

Bt2—20 to 34 inches; pink (7.5YR 7/3) very gravelly silty clay loam, brown (7.5YR 5/3) moist; weak medium subangular blocky structure and weak coarse subangular blocky; hard, firm, moderately sticky and moderately plastic; many very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 65 percent faint clay films on faces of peds and in pores; 15 percent distinct silt coatings on faces of peds; 45 percent gravel, 5 percent paragravel, and 5 percent cobbles; strongly acid (pH 5.2); gradual wavy boundary.

Bt3—34 to 41 inches; pink (7.5YR 7/4) very gravelly silty clay loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure and weak coarse subangular blocky; hard, firm, moderately sticky and moderately plastic; many very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 65 percent distinct clay films on faces of peds and in pores; 15 percent distinct silt coatings on faces of peds; 35 percent gravel and 5 percent paragravel; strongly acid (pH 5.5); clear wavy boundary.

Bt4—41 to 60 inches; pink (5YR 7/4) very cobbly silty clay loam, reddish brown (5YR 5/4) moist; weak medium subangular blocky structure and weak coarse subangular blocky; hard, firm, moderately sticky and moderately plastic; many very fine and fine roots; many very fine and fine tubular pores; 65 percent prominent clay films on faces of peds and in pores; 15 percent prominent silt coatings on

faces of peds; 10 percent gravel, 5 percent paragravel, 35 percent cobbles, and 5 percent paracobbles; strongly acid (pH 5.5).

Range in Characteristics

Depth to strongly contrasting textural stratification (Bt1 horizon): 11 to 24 inches

Reggear Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills, structural benches

Parent material: Volcanic ash over loess

Slope range: 3 to 35 percent

Elevation: 2,380 to 3,660 feet

Mean annual precipitation: 26 to 33 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 85 to 120 days

Taxonomic class: Fine-silty, mixed, active, frigid Vitrandic Fraglossudalfs

Typical Pedon

Reggear ashy silt loam in an area of Reggear, moist-Sly complex, 3 to 25 percent slopes, about 1.2 miles southwest of St. Maries, Idaho; about 1,850 feet south and 2,400 feet east of the northwest corner of section 28, T. 46 N., R. 2 W.; latitude 47 degrees, 18 minutes, 24 seconds north and longitude 116 degrees, 35 minutes, 52 seconds west, NAD 83; UTM 530404 meters east, 5239322 meters north, zone 11.

Oi—0 to 2 inches; slightly decomposed plant material.

A—2 to 5 inches; light brownish gray (10YR 6/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to weak very fine and fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine tubular and irregular pores; slightly acid (pH 6.5); clear wavy boundary.

BE—5 to 9 inches; pale brown (10YR 6/3) ashy silt loam, brown (10YR 4/3) moist; weak medium subangular blocky structure parting to weak very fine and fine angular blocky; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular and irregular pores; slightly acid (pH 6.2); gradual wavy boundary.

E—9 to 14 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; weak medium and coarse angular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; moderately acid (pH 6.0); gradual wavy boundary.

E/Bt—14 to 22 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist (E part); light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); weak medium and coarse angular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 5 percent faint clay films on faces of peds and in pores; 5 percent faint silt coatings on faces of peds; 1 percent very fine masses of oxidized iron; very strongly acid (pH 5.0); gradual wavy boundary.

Btx/E—22 to 39 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); pale yellow (2.5Y 8/2) silt loam, pale brown (10YR 6/3) moist (E part); moderate coarse and very coarse prismatic structure; very hard, very firm, slightly sticky and moderately plastic; brittle; few very fine and fine roots between peds; many very fine and fine and few medium tubular pores; 30 percent distinct brown (7.5YR 4/4) clay films on faces of peds and in pores; 1 percent fine masses of oxidized iron; very strongly acid (pH 4.5); gradual wavy boundary.

Btxb1—39 to 50 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure; extremely hard, extremely firm, moderately sticky and moderately plastic; brittle; few very fine and fine roots between peds; many very fine and fine and few medium tubular pores; 30 percent distinct brown (7.5YR 4/4) and prominent dark brown (7.5YR 3/4) clay films on faces of peds and in pores; 1 percent fine and medium masses of oxidized iron; 1 percent fine gravel; very strongly acid (pH 4.5); gradual wavy boundary.

Btxb2—50 to 60 inches; light yellowish brown (10YR 6/4) and yellowish brown (10YR 5/6) silt loam, dark yellowish brown (10YR 4/4 and 3/6) moist; moderate coarse prismatic structure parting to weak medium and coarse angular blocky; extremely hard, extremely firm, moderately sticky and moderately plastic; brittle; many very fine and fine and few medium tubular pores; 30 percent distinct brown (7.5YR 4/4 and 5/4) clay films on faces of peds and in pores; 1 percent fine iron-manganese masses; 1 percent fine prominent iron-manganese concretions; 1 percent fine gravel; very strongly acid (pH 4.5).

Range in Characteristics

Depth to highest seasonal water table: 18 to 22 inches in March through May

Depth to fragipan: 20 to 40 inches

Saint Maries Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Escarpments, mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from siltstone and quartzite

Slope range: 35 to 70 percent

Elevation: 2,200 to 3,900 feet

Mean annual precipitation: 25 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Eutrudepts

Typical Pedon

Saint Maries very gravelly ashy silt loam in an area of Saint Maries-Huckle complex, 35 to 70 percent slopes, about 4 miles west of St. Maries, Idaho; about 1,250 feet north and 2,400 feet west of the southeast corner of section 13, T. 46 N., R. 3 W.; latitude 47 degrees, 19 minutes, 39.60 seconds north and longitude 116 degrees, 39 minutes, 29.00 seconds west, NAD 83; UTM 525837 meters east, 5241634 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

- A—2 to 4 inches; grayish brown (10YR 5/2) very gravelly ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; 25 percent gravel, 5 percent channers, and 5 percent cobbles; neutral (pH 6.8); abrupt wavy boundary.
- Bw1—4 to 9 inches; very pale brown (10YR 7/3) very gravelly ashy silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 30 percent gravel and 5 percent cobbles; slightly acid (pH 6.3); gradual wavy boundary.
- Bw2—9 to 22 inches; very pale brown (10YR 7/3) very gravelly ashy loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium and coarse tubular pores; 45 percent gravel and 5 percent cobbles; slightly acid (pH 6.1); clear wavy boundary.
- BC—22 to 28 inches; pale yellow (2.5Y 7/3) extremely gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 55 percent gravel and 10 percent cobbles; slightly acid (pH 6.4); gradual wavy boundary.
- C1—28 to 38 inches; pale yellow (2.5Y 7/3) extremely flaggy loam, light yellowish brown (2.5Y 6/3) moist; massive; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 20 percent gravel, 15 percent channers, 10 percent cobbles, and 25 percent flagstones; slightly acid (pH 6.3); gradual wavy boundary.
- C2—38 to 47 inches; pale yellow (2.5Y 7/3) extremely cobbly loam, light yellowish brown (2.5Y 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 25 percent gravel, 5 percent channers, and 40 percent cobbles; strongly acid (pH 5.5); gradual wavy boundary.
- C3—47 to 60 inches; pale yellow (2.5Y 7/3) extremely cobbly loam, light yellowish brown (2.5Y 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium tubular and irregular pores; 35 percent gravel and 40 percent cobbles; moderately acid (pH 6.0).

Santa Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills

Parent material: Volcanic ash over loess

Slope range: 3 to 20 percent

Elevation: 2,610 to 3,050 feet

Mean annual precipitation: 25 to 32 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Coarse-silty, mixed, superactive, frigid Vitrandic Fragixeralfs

Typical Pedon

Santa ashy silt loam, 3 to 8 percent slopes; about 50 feet north and 2,500 feet east of the southwest corner of section 3, T. 43 N., R. 4 W.; latitude 47 degrees, 5 minutes, 27.00 seconds north and longitude 116 degrees, 49 minutes, 28.50 seconds west, NAD 83; UTM 513308 meters east, 5215275 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; light brownish gray (10YR 6/2) ashy silt loam, brown (10YR 4/3) moist; weak very thin platy structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine tubular pores; moderately acid (pH 5.7); clear wavy boundary.

AB—4 to 9 inches; light gray (10YR 7/2) ashy silt loam, brown (10YR 4/3) moist; weak fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; common very fine and fine tubular pores; moderately acid (pH 6.0); gradual wavy boundary.

Bw—9 to 15 inches; light gray (10YR 7/2) silt loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; moderately acid (pH 6.0); clear wavy boundary.

Ec1—15 to 21 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine, fine, and medium tubular pores; 30 percent medium distinct yellowish brown (10YR 5/4) masses of oxidized iron; 30 percent fine iron-manganese concretions; moderately acid (pH 5.7); clear wavy boundary.

Ec2—21 to 34 inches; light gray (10YR 7/2) silt, light brownish gray (10YR 6/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; common very fine and fine tubular pores; 30 percent medium distinct yellowish brown (10YR 5/4) masses of oxidized iron; 30 percent fine iron-manganese concretions; strongly acid (pH 5.5); abrupt wavy boundary.

Btxb—34 to 44 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; strong very coarse prismatic structure parting to strong medium angular blocky; very hard, very firm, moderately sticky and moderately plastic; brittle; few very fine, medium, and coarse roots between peds; few fine and medium vesicular pores; 20 percent discontinuous faint yellowish brown (10YR 5/4) clay films on faces of peds and 10 percent discontinuous faint clay films in pores; 15 percent distinct silt coatings on top of peds and on vertical faces of peds; strongly acid (pH 5.5); gradual wavy boundary.

Btxcb—44 to 60 inches; yellowish brown (10YR 5/4) silty clay loam, pale brown (10YR 6/3) moist; strong medium and coarse prismatic structure parting to strong medium angular blocky; very hard, very firm, moderately sticky and moderately plastic; brittle; few fine, medium, and coarse roots between peds; few fine and medium vesicular pores; 35 percent continuous distinct brown (7.5YR 5/4) clay films on faces of peds and 20 percent discontinuous distinct clay films in pores; 30 percent fine iron-manganese concretions; moderately acid (pH 5.9).

Range in Characteristics

Depth to highest seasonal water table: 14 to 19 inches in February

Depth to fragipan: 23 to 40 inches

Schumacher Series

Depth class: Deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Landform: Mountain slopes

Parent material: Loess over colluvium derived from metasedimentary rock

Slope range: 5 to 40 percent

Elevation: 2,550 to 3,500 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 45 to 49 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Fine-loamy, mixed, superactive, mesic Ultic Argixerolls

Typical Pedon

Schumacher silt loam in an area of Schumacher-Tekoa complex, 25 to 45 percent slopes; about 970 feet north and 2,075 feet east of the southwest corner of section 7, T. 44 N., R. 5 W.; latitude 47 degrees, 9 minutes, 57.40 seconds north and longitude 117 degrees, 0 minutes, 54.10 seconds west, NAD 83; UTM 498844 meters east, 5223608 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate very fine and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine and fine, common medium, and few coarse tubular pores; 10 percent gravel; slightly alkaline (pH 7.8); clear wavy boundary.

BA—8 to 20 inches; brown (10YR 4/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to strong fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine and fine, common medium, and few coarse tubular pores; 10 percent gravel; slightly acid (pH 6.5); gradual wavy boundary.

Bt1—20 to 27 inches; brown (10YR 5/3) silt loam, brown (7.5YR 4/3) moist; moderate medium and coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and common medium tubular pores; 30 percent faint clay films on faces of peds and 5 percent distinct organoargillans on faces of peds; 10 percent distinct silt coatings on faces of peds; krotovinas or pockets of buried A material; 10 percent gravel; slightly acid (pH 6.5); clear wavy boundary.

Bt2—27 to 34 inches; dark yellowish brown (10YR 4/4) gravelly silt loam, dark yellowish brown (10YR 3/4) moist; moderate coarse subangular blocky structure parting to strong medium angular blocky; moderately hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; many very fine and fine and common medium tubular pores; 35 percent faint and 10 percent distinct clay films on faces of peds; 10 percent distinct silt coatings on faces of peds; 15 percent gravel and 2 percent paragravel; neutral (pH 6.8); gradual wavy boundary.

Bt3—34 to 41 inches; yellowish brown (10YR 5/4) very cobbly clay loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; many very fine and fine and common medium tubular

pores; 35 percent faint and 10 percent distinct clay films on faces of peds; 20 percent gravel and 25 percent cobbles; neutral (pH 7.0); gradual wavy boundary.

Bt4—41 to 47 inches; brown (7.5YR 4/4) gravelly clay loam, brown (7.5YR 4/3) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; many very fine and fine tubular pores; 40 percent faint and 10 percent distinct clay films and 5 percent distinct organoargillans on faces of peds; 25 percent gravel, 2 percent paragravel, and 5 percent cobbles; neutral (pH 7.2); abrupt wavy boundary.

R—47 to 57 inches; indurated metasedimentary rock.

Range in Characteristics

Depth to lithic bedrock: 40 to 60 inches

Seddow Series

Depth class: Deep to lithic bedrock ([fig. 21](#))

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, structural benches

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 3 to 55 percent

Elevation: 2,200 to 3,160 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-loamy, mixed, superactive, frigid Vitrandic Haploxeralfs

Typical Pedon

Seddow ashy silt loam, 15 to 35 percent slopes, about 4 miles northwest of St. Maries, Idaho; about 300 feet south and 1,675 feet west of the northeast corner of section 4, T. 46 N., R. 2 W.; latitude 47 degrees, 22 minutes, 14.50 seconds north and longitude 116 degrees, 35 minutes, 35.50 seconds west, NAD 83; UTM 530713 meters east, 5246440 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 6 inches; brown (10YR 5/3) ashy silt loam, dark brown (10YR 3/3) moist; moderate very fine and fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium and coarse, and few very coarse roots; many very fine and fine and few medium tubular pores; 1 percent gravel; slightly acid (pH 6.5); clear wavy boundary.

Bw—6 to 10 inches; pale brown (10YR 6/3) ashy silt loam, dark brown (7.5YR 3/3) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse and very coarse roots; many very fine and fine and few medium tubular pores; 1 percent gravel; moderately acid (pH 6.0); clear wavy boundary.

Bt1—10 to 16 inches; light yellowish brown (10YR 6/4) and brown (7.5YR 5/4) silt loam, dark brown (7.5YR 3/4) and dark yellowish brown (10YR 4/4) moist; moderate medium and coarse subangular blocky structure parting to moderate very fine and fine angular blocky; moderately hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 30 percent



Figure 21.—Typical profile of Seddow ashy silt loam in an area of Reggear-Seddow complex, 3 to 25 percent slopes. Numbers on tape indicate centimeters.

distinct brown (7.5YR 4/4) clay films on faces of peds; 5 percent prominent very pale brown (10YR 7/3) silt coatings on faces of peds; 2 percent gravel; moderately acid (pH 5.7); clear wavy boundary.

2Bt2—16 to 24 inches; brown (7.5YR 4/4) silt loam, dark brown (7.5YR 3/4 and 3/3) moist; moderate very coarse and coarse angular blocky structure parting to strong very fine and fine angular blocky; hard, firm, moderately sticky and moderately plastic; common very fine and fine and few medium and coarse roots; common very fine and fine and few medium and coarse tubular pores; 50 percent faint brown (7.5YR 4/3) and distinct reddish brown (5YR 4/4) clay films on faces of peds and in pores; 5 percent discontinuous prominent pale brown (10YR 6/3) silt coatings on vertical faces of peds; 8 percent gravel; moderately acid (pH 5.7); gradual wavy boundary.

2Bt3—24 to 32 inches; brown (7.5YR 4/4) cobbly clay loam, dark brown (7.5YR 3/4 and 3/3) moist; moderate medium and coarse subangular blocky structure parting to strong very fine and fine angular blocky; hard, very firm, moderately sticky and

moderately plastic; few very fine, fine, and medium roots; common very fine and fine and few medium and coarse tubular pores; 50 percent faint brown (7.5YR 4/3) and distinct reddish brown (5YR 4/4) clay films on faces of peds and in pores; 5 percent discontinuous prominent pale brown (10YR 6/3) silt coatings on vertical faces of peds; 15 percent gravel and 15 percent cobbles; moderately acid (pH 5.6); gradual wavy boundary.

2BCt—32 to 45 inches; brown (7.5YR 4/3) and dark brown (7.5YR 3/4) very cobbly clay loam, dark brown (7.5YR 3/2) and very dark brown (7.5YR 2.5/3) moist; weak coarse subangular blocky structure parting to weak very fine and fine angular blocky; moderately hard, firm, moderately sticky and very plastic; few very fine, fine, and medium roots; common very fine and fine and few medium and coarse tubular pores; 5 percent distinct reddish brown (5YR 4/3) clay films on rock fragments; 1 percent fine prominent reddish brown (2.5YR 4/4) and red (2.5YR 4/6) masses of oxidized iron around rock fragments; 15 percent gravel, 2 percent paragravel, and 35 percent cobbles; moderately acid (pH 5.7); abrupt wavy boundary.

R—45 to 55 inches; indurated basalt; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 40 to 60 inches

Setters Series

Depth class: Very deep ([fig. 22](#))

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 20 percent

Elevation: 2,600 to 3,300 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine, smectitic, frigid Ultic Palexerolls

Typical Pedon

Setters silt loam in an area of Setters-Taney complex, 3 to 20 percent slopes, about 2.5 miles southeast of Tensed, Idaho; about 175 feet south and 1,870 feet east of the northwest corner of section 20, T. 44 N., R. 4 W.; latitude 47 degrees, 8 minutes, 54.00 seconds north and longitude 116 degrees, 52 minutes, 1.90 seconds west, NAD 83; UTM 510068 meters east, 5221658 meters north, zone 11.

Ap—0 to 4 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate medium platy structure parting to strong medium and coarse granular; soft, very friable, nonsticky and nonplastic; many very fine and fine roots; common very fine and fine tubular pores; 10 percent continuous silt coatings on faces of peds; strongly acid (pH 5.5); clear smooth boundary.

A—4 to 10 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate coarse subangular blocky structure parting to strong medium subangular blocky; slightly hard, very friable, slightly sticky and nonplastic; many very fine and common fine roots; many very fine and common fine tubular pores; 10 percent continuous silt coatings on faces of peds; very strongly acid (pH 5.0); clear smooth boundary.



Figure 22.—Typical profile of Setters silt loam, 3 to 25 percent slopes.

- Bw—10 to 15 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 3/4) moist; strong medium subangular blocky structure parting to moderate coarse subangular blocky; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and common fine tubular pores; 30 percent continuous silt coatings on faces of peds; slightly acid (pH 6.5); clear wavy boundary.
- BE—15 to 19 inches; brown (10YR 4/3) silt loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; moderately hard, firm, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; 20 percent continuous silt coatings on faces of peds and in pores; 2 percent fine masses of oxidized iron; neutral (pH 7.0); clear wavy boundary.
- E—19 to 22 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; moderate medium subangular blocky structure; moderately hard, friable, nonsticky and nonplastic; few very fine and fine roots; few very fine and fine tubular pores;

25 percent continuous silt coatings on faces of peds and in pores; 4 percent fine masses of oxidized iron; 1 percent fine gravel; neutral (pH 7.0); abrupt wavy boundary.

Btcb1—22 to 43 inches; yellowish brown (10YR 5/4) silty clay, dark yellowish brown (10YR 4/4) moist; moderate extremely coarse prismatic structure parting to strong very coarse prismatic; extremely hard, slightly rigid, moderately sticky and moderately plastic; few very fine roots; few very fine and fine tubular pores; 15 percent continuous clay films on faces of peds, 10 percent continuous clay films in pores, and 5 percent patchy organoargillans in root channels; 2 percent fine manganese coatings; 2 percent fine iron-manganese nodules; slightly alkaline (pH 7.4); gradual wavy boundary.

Btcb2—43 to 60 inches; yellowish brown (10YR 5/4) silty clay, dark yellowish brown (10YR 4/4) moist; moderate coarse angular blocky structure; extremely hard, extremely firm, moderately sticky and moderately plastic; few very fine roots; common very fine tubular pores; 15 percent continuous clay films on faces of peds, 10 percent continuous clay films in pores, and 5 percent patchy organoargillans in root channels; 2 percent fine manganese coatings; 2 percent fine iron-manganese nodules; neutral (pH 7.0).

Range in Characteristics

Depth to highest seasonal water table: 15 to 20 inches in February

Depth to strongly contrasting textural stratification (Btcb1 horizon): 21 to 30 inches

Sharptop Series

Depth class: Deep to paralithic bedrock (fig. 23)

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills, structural benches

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 3 to 20 percent

Elevation: 2,580 to 3,210 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Coarse-silty, isotic, frigid Vitrandic Haploxeralfs

Typical Pedon

Sharptop ashy silt loam in an area of Sharptop-Santa complex, 8 to 20 percent slopes, about 2 miles north of Plummer, Idaho; about 440 feet south and 2,000 feet east of the northwest corner of section 6, T. 46 N., R. 4 W.; latitude 47 degrees, 21 minutes, 54.83 seconds north and longitude 116 degrees, 52 minutes, 58.17 seconds west, NAD 83; UTM 508852 meters east, 5245745 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 1 percent gravel; neutral (pH 7.1); clear smooth boundary.



Figure 23.—Typical profile of Sharptop ashy silt loam in an area of Reggear-Sharptop, basalt substratum complex, 3 to 12 percent slopes. Numbers on tape indicate centimeters.

- Bw—4 to 9 inches; pale brown (10YR 6/3) ashy silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 2 percent gravel; neutral (pH 7.1); clear wavy boundary.
- BtE—9 to 17 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse prismatic structure parting to moderate fine and medium subangular blocky; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and fine tubular pores; 10 percent patchy faint clay films on faces of peds; 60 percent continuous faint silt coatings on faces of peds; 3 percent gravel; neutral (pH 6.6); clear wavy boundary.
- BtxbE1—17 to 27 inches; very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist; weak medium and coarse prismatic structure parting to moderate medium and coarse subangular blocky; very hard, firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots between

pedes; many very fine and common fine tubular pores; 20 percent patchy distinct clay films on faces of pedes; 60 percent continuous faint silt coatings on faces of pedes; 1 percent fine faint iron-manganese masses; about 20 percent fragic material; 5 percent gravel; slightly acid (pH 6.1); gradual wavy boundary.

BtxbE2—27 to 42 inches; very pale brown (10YR 7/4) silt loam, yellowish brown (10YR 5/4) moist; weak medium and coarse prismatic structure parting to moderate medium and coarse subangular blocky; hard, very firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots between pedes; many very fine and fine and few medium and coarse tubular pores; 20 percent patchy distinct clay films on faces of pedes, 10 percent patchy distinct clay films in pores, and 5 percent patchy distinct organoargillans in root channels; 20 percent discontinuous faint silt coatings on faces of pedes and 10 percent patchy distinct silt coatings in pores and root channels; 1 percent fine faint iron-manganese masses; about 50 percent fragic material; 9 percent gravel; slightly acid (pH 6.1); clear wavy boundary.

Btxb—42 to 49 inches; yellowish brown (10YR 5/4) paragravelly silt loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium prismatic structure parting to moderate medium and coarse subangular blocky; very hard, firm, slightly sticky and moderately plastic; few very fine, fine, and medium roots between pedes; many very fine and few fine tubular pores; 25 percent discontinuous distinct clay films on faces of pedes, 15 percent patchy distinct clay films in pores, and 5 percent patchy distinct organoargillans in root channels; 10 percent patchy distinct silt coatings in pores and 15 percent patchy distinct silt coatings in root channels; 1 percent fine faint iron-manganese masses; about 30 percent fragic material; 5 percent gravel and 15 percent paragravel; slightly acid (pH 6.5); gradual wavy boundary.

2Cr—49 to 59 inches; moderately cemented quartzite.

Range in Characteristics

Depth to paralithic bedrock: 40 to 60 inches

Shayhill Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Canyons, escarpments, structural benches

Parent material: Volcanic ash and loess over colluvium derived from basalt

Slope range: 15 to 65 percent

Elevation: 2,200 to 3,150 feet

Mean annual precipitation: 28 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 115 days

Taxonomic class: Loamy-skeletal, isotic, frigid Vitrandic Hapludalfs

Typical Pedon

Shayhill ashy silt loam in an area of Kingspeak-Shayhill, stony complex, 5 to 40 percent slopes, about 1.5 miles south of Chatcolet, Idaho; about 1,820 feet south and 375 feet west of the northeast corner of section 12, T. 46 N., R. 4 W.; latitude 47 degrees, 20 minutes, 48.60 seconds north and longitude 116 degrees, 46 minutes, 11.00 seconds west, NAD 83; UTM 517393 meters east, 5243733 meters north, zone 11.

- Oi—0 to 1 inch; slightly decomposed plant material.
- Oe—1 to 2 inches; moderately decomposed plant material.
- A—2 to 3 inches; grayish brown (10YR 5/2) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and few medium tubular pores; 15 percent very fine mica flakes; 5 percent gravel; slightly acid (pH 6.3); abrupt wavy boundary.
- Bw1—3 to 10 inches; light yellowish brown (10YR 6/4) ashy silt loam, brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 15 percent very fine mica flakes; 5 percent gravel and 5 percent cobbles; slightly acid (pH 6.3); gradual wavy boundary.
- Bw2—10 to 19 inches; light yellowish brown (10YR 6/4) cobbly silt loam, brown (10YR 4/3) moist; weak medium and coarse prismatic structure; moderately hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine, common medium, and few coarse tubular pores; 15 percent very fine mica flakes; 5 percent fine gravel and 15 percent cobbles; slightly acid (pH 6.3); gradual wavy boundary.
- Bw3—19 to 28 inches; pale brown (10YR 6/3) very stony silt loam, brown (10YR 4/3) moist; weak fine and medium prismatic structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine and fine and few medium tubular pores; 15 percent very fine mica flakes; 5 percent fine gravel, 20 percent cobbles, and 35 percent stones; slightly acid (pH 6.2); clear wavy boundary.
- Bt1—28 to 40 inches; light yellowish brown (10YR 6/4) extremely cobbly loam, brown (10YR 4/3) moist; weak fine and medium prismatic structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium tubular pores; 70 percent distinct brown (7.5YR 4/4) clay films on faces of peds and in pores; 15 percent distinct silt and sand coatings on faces of peds; 15 percent very fine mica flakes; 40 percent fine gravel, 20 percent cobbles, and 5 percent stones; slightly acid (pH 6.2); clear wavy boundary.
- Bt2—40 to 48 inches; light yellowish brown (10YR 6/4) very cobbly loam, brown (10YR 4/3) moist; weak very fine and fine prismatic structure; hard, firm, moderately sticky and moderately plastic; few very fine, fine, and medium roots; common very fine and fine and few medium tubular pores; 70 percent distinct brown (7.5YR 4/4) clay films on faces of peds and in pores; 15 percent distinct silt and sand coatings on faces of peds; 15 percent very fine mica flakes; 10 percent gravel, 5 percent paragravel, 25 percent cobbles, and 5 percent stones; slightly acid (pH 6.1); gradual wavy boundary.
- BC—48 to 55 inches; light yellowish brown (2.5Y 6/4) extremely stony loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and fine and few medium tubular and irregular pores; 15 percent faint clay films on faces of peds; 15 percent very fine mica flakes; 15 percent gravel, 5 percent paragravel, 30 percent cobbles, and 30 percent stones; slightly acid (pH 6.2); gradual wavy boundary.
- C—55 to 64 inches; light yellowish brown (10YR 6/4 and 2.5Y 6/4) extremely cobbly loam, olive brown (2.5Y 4/4) and dark yellowish brown (10YR 4/6) moist; massive; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and fine and few medium tubular and irregular pores;

15 percent faint clay films on faces of peds; 25 percent gravel, 5 percent paragravel, 25 percent cobbles, and 15 percent stones; slightly acid (pH 6.2).

Range in Characteristics

Depth to strongly contrasting textural stratification (Bw3 horizon): 19 to 30 inches

Sinkler Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Parent material: Volcanic ash over loess

Slope range: 10 to 35 percent

Elevation: 2,620 to 3,350 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-silty, mixed, superactive, frigid Vitrandic Haploxeralfs

Typical Pedon

Sinkler ashy silt loam in an area of Sinkler-Arson complex, 10 to 40 percent slopes ([fig. 24](#)), about 2.5 miles northwest of Plummer, Idaho; about 540 feet south and 2,290 feet west of the northeast corner of section 10, T. 46 N., R. 5 W.; latitude 47 degrees, 21 minutes, 1.01 seconds north and longitude 116 degrees, 56 minutes, 39.63 seconds west, NAD 83; UTM 504214 meters east, 5244075 meters north, zone 11.

Oi—0 to 0.5 inch; slightly decomposed plant material.

Oe—0.5 to 1 inch; moderately decomposed plant material.

A—1 to 6 inches; grayish brown (10YR 5/2) ashy silt loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure parting to moderate medium and coarse granular; soft, very friable, nonsticky and nonplastic; many very fine and fine and common medium roots; common very fine and fine tubular pores; 3 percent fine gravel; moderately acid (pH 5.6); abrupt wavy boundary.

Bw—6 to 12 inches; pale brown (10YR 6/3) ashy silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine, fine, and medium and few coarse roots; many very fine and few fine tubular pores; 3 percent patchy faint clay films on faces of peds; 8 percent discontinuous faint light gray (10YR 7/2) silt coatings in root channels; 5 percent fine gravel; moderately acid (pH 5.9); clear wavy boundary.

EBt—12 to 20 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; strong fine and medium subangular blocky structure; hard, firm, slightly sticky and nonplastic; common very fine, fine, and medium and few coarse roots; many very fine and fine tubular pores; 3 percent discontinuous distinct clay films on faces of peds and in pores; 10 percent discontinuous faint light gray (10YR 7/2) silt coatings in root channels; 3 percent fine gravel; moderately acid (pH 6.0); clear wavy boundary.

BtE—20 to 28 inches; light yellowish brown (10YR 6/4) silt loam, brown (7.5YR 4/4) moist; strong medium and coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine, fine, and coarse and few medium roots; many very fine and fine and few medium tubular pores; 5 percent



Figure 24.—Typical profile of Sinkler ashy silt loam in an area of Sinkler-Arson complex, 10 to 40 percent slopes. Numbers on tape indicate centimeters.

discontinuous distinct strong brown (7.5YR 5/6) clay films on faces of peds and 10 percent discontinuous distinct clay films in pores; 10 percent discontinuous distinct light gray (10YR 7/2) silt coatings on faces of peds and 5 percent discontinuous faint silt coatings in root channels; 3 percent fine gravel; moderately acid (pH 6.0); clear wavy boundary.

Bt—28 to 38 inches; light yellowish brown (10YR 6/4) silt loam, brown (7.5YR 4/4) moist; strong fine and medium angular blocky structure; very hard, extremely firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine tubular pores; 15 percent discontinuous prominent strong brown (7.5YR 5/6) clay films on faces of peds, 10 percent discontinuous prominent clay films in pores, and 3 percent patchy prominent organoargillans in root channels; 10 percent discontinuous distinct light gray (10YR 7/2) silt coatings on vertical faces of peds and 5 percent discontinuous distinct silt coatings in root channels; 5 percent fine gravel and 5 percent medium gravel; moderately acid (pH 6.0); clear wavy boundary.

Btb—38 to 51 inches; brown (7.5YR 5/4) silt loam, dark brown (7.5YR 3/4) moist; strong fine and medium angular blocky structure; extremely hard, slightly rigid,

moderately sticky and moderately plastic; common very fine and fine and few medium and coarse roots between peds; many very fine and few fine tubular pores; 25 percent continuous distinct strong brown (7.5YR 5/6) clay films on faces of peds, 10 percent discontinuous distinct clay films in pores, and 3 percent patchy distinct organoargillans in root channels; 10 percent discontinuous prominent light gray (10YR 7/2) silt coatings on vertical faces of peds and 5 percent discontinuous prominent silt coatings in root channels; 3 percent fine gravel and 2 percent medium gravel; slightly acid (pH 6.1); gradual wavy boundary.

Btxb—51 to 60 inches; light brown (7.5YR 6/4) silty clay loam, brown (7.5YR 4/4) moist; moderate medium and coarse angular blocky structure; extremely hard, slightly rigid, moderately sticky and moderately plastic; few very fine and fine and few medium roots between peds; many very fine tubular pores; 30 percent continuous distinct strong brown (7.5YR 5/6) clay films on faces of peds, 15 percent discontinuous distinct clay films in pores, and 3 percent patchy distinct organoargillans in root channels; 15 percent discontinuous prominent light gray (10YR 7/2) silt coatings on vertical faces of peds and 5 percent discontinuous prominent silt coatings in root channels; about 40 percent fragic material; 5 percent fine gravel and 5 percent medium gravel; moderately acid (pH 6.0).

Sly Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus, foothills

Landform: Canyons, escarpments, hills, structural benches

Parent material: Volcanic ash over loess over colluvium derived from basalt

Slope range: 10 to 50 percent

Elevation: 2,500 to 3,100 feet

Mean annual precipitation: 28 to 33 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Fine-loamy, mixed, superactive, frigid Vitrandic Hapludalfs

Typical Pedon

Sly ashy silt loam in an area of Sly-Shayhill complex, dry, 30 to 60 percent slopes, in the Hells Gulch area; about 2,665 feet south and 2,325 feet east of the northwest corner of section 4, T. 46 N., R. 2 W.; latitude 47 degrees, 21 minutes, 51 seconds north and longitude 116 degrees, 35 minutes, 54 seconds west, NAD 83; UTM 530329 meters east, 5245716 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 5 inches; brown (7.5YR 5/3) ashy silt loam, dark brown (7.5YR 3/3) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, and medium tubular pores; 3 percent gravel; neutral (pH 6.7); abrupt smooth boundary.

Bw—5 to 9 inches; light brown (7.5YR 6/3) ashy silt loam, brown (7.5YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, medium, and coarse tubular pores; 3 percent gravel; slightly acid (pH 6.5); clear wavy boundary.

- Bt1—9 to 18 inches; light brown (7.5YR 6/3) silt loam, brown (7.5YR 4/3) moist; weak medium and coarse angular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, medium, and coarse tubular pores; 10 percent distinct brown (7.5YR 4/4) clay films on faces of peds and in pores; 10 percent distinct pale brown (10YR 6/3) silt coatings on faces of peds; 5 percent gravel; slightly acid (pH 6.3); gradual wavy boundary.
- Bt2—18 to 29 inches; light brown (7.5YR 6/3) silt loam, brown (7.5YR 4/3) moist; moderate medium and coarse angular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, medium, and coarse tubular pores; 20 percent distinct brown (7.5YR 4/4) clay films on faces of peds and 10 percent distinct clay films in pores; 15 percent distinct pale brown (10YR 6/3) silt coatings on faces of peds; 10 percent gravel and 3 percent cobbles; slightly acid (pH 6.3); gradual wavy boundary.
- Bt3—29 to 44 inches; brown (7.5YR 5/3) and light brown (7.5YR 6/3) silt loam, brown (7.5YR 4/3 and 4/4) moist; moderate medium and coarse angular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, medium, and coarse tubular pores; 30 percent distinct dark brown (7.5YR 3/4) clay films on faces of peds and 20 percent distinct clay films in pores; 35 percent distinct pale brown (10YR 6/3) silt coatings on faces of peds; 10 percent gravel and 3 percent cobbles; slightly acid (pH 6.1); clear wavy boundary.
- Bt4—44 to 60 inches; light brown (7.5YR 6/4) gravelly silt loam, brown (7.5YR 4/4) moist; moderate medium and coarse angular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; common very fine, fine, medium, and coarse tubular pores; 30 percent distinct dark brown (7.5YR 3/4) clay films on faces of peds and 20 percent distinct clay films in pores; 30 percent distinct pale brown (10YR 6/3) silt coatings on faces of peds; 10 percent gravel and 5 percent cobbles; moderately acid (pH 6.0).

Southwick Taxadjunct

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 3 to 25 percent

Elevation: 2,500 to 3,100 feet

Mean annual precipitation: 20 to 28 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 130 days

Taxonomic class: Fine-silty, mixed, active, mesic Vitrandic Argixerolls

Typical Pedon

Southwick ashy silt loam in an area of Southwick-Driscoll complex, 3 to 15 percent slopes; about 1,810 feet south and 980 feet east of the northwest corner of section 9, T. 46 N., R. 5 W.; latitude 47 degrees, 20 minutes, 47.30 seconds north and longitude 116 degrees, 58 minutes, 41.30 seconds west, NAD 83; UTM 501652 meters east, 5243667 meters north, zone 11.

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- Ap—0 to 6 inches; brown (10YR 4/3) ashy silt loam, very dark brown (10YR 2/2) moist; weak very fine and fine subangular blocky structure; soft, friable, slightly sticky and nonplastic; many very fine, common fine, and few medium roots; common very fine and fine tubular pores; moderately acid (pH 5.7); clear smooth boundary.
- A1—6 to 10 inches; brown (10YR 4/3) ashy silt loam, very dark brown (10YR 2/2) moist; moderate fine subangular blocky structure; moderately hard, friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; moderately acid (pH 6.0); abrupt smooth boundary.
- A2—10 to 13 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; extremely hard, firm, slightly sticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; slightly acid (pH 6.3); clear smooth boundary.
- A3—13 to 18 inches; brown (10YR 4/3) silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; neutral (pH 6.7); clear smooth boundary.
- Bw—18 to 28 inches; yellowish brown (10YR 5/4) silt loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; extremely hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; neutral (pH 6.7); abrupt smooth boundary.
- E—28 to 31 inches; light gray (10YR 7/2) silt loam, pale brown (10YR 6/3) moist; weak thin and very thin platy structure; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; few fine tubular pores; slightly acid (pH 6.5); abrupt smooth boundary.
- Bt_{cx}b—31 to 49 inches; light yellowish brown (10YR 6/4) and brown (7.5YR 5/4) silty clay loam, dark brown (10YR 3/3) and dark yellowish brown (10YR 4/4) moist; strong medium and coarse prismatic structure; rigid, very firm, slightly sticky and moderately plastic; common fine roots between peds; few fine tubular pores; 20 percent distinct clay films on faces of peds; 30 percent distinct silt coatings on faces of peds; 2 percent fine distinct iron-manganese concretions; slightly acid (pH 6.5); abrupt smooth boundary.
- Bt_{cb}1—49 to 54 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 3/6 and 4/4) moist; moderate fine and medium subangular blocky structure; extremely hard, firm, slightly sticky and moderately plastic; few very fine roots; common fine tubular pores; 25 percent distinct clay films on faces of peds, 5 percent prominent organoargillans on vertical faces of peds, and 5 percent prominent organoargillans in root channels; 2 percent fine distinct iron-manganese concretions; slightly acid (pH 6.2); clear smooth boundary.
- Bt_{cb}2—54 to 70 inches; yellowish brown (10YR 5/6) silt loam, dark yellowish brown (10YR 3/4 and 4/4) moist; moderate medium angular blocky structure; extremely hard, firm, slightly sticky and moderately plastic; few very fine roots; few very fine tubular pores; 25 percent distinct clay films on faces of peds, 10 percent prominent organoargillans on vertical faces of peds and 10 percent prominent organoargillans in root channels; 2 percent medium distinct iron-manganese concretions; slightly acid (pH 6.5).

Range in Characteristics

Depth to highest seasonal water table: 24 to 32 inches in January through April

Depth to fragic characteristics (Bt_{cx}b horizon): 20 to 40 inches

Taxadjunct Features

The Southwick soils in this survey area are considered a taxadjunct to the Southwick series because the influence of volcanic ash in the upper part meets the criteria for the Vitrandic subgroup.

Stewah Series

Depth class: Deep to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills

Landform: Hills

Parent material: Volcanic ash and loess over colluvium over residuum derived from metasedimentary rock

Slope range: 10 to 35 percent

Elevation: 2,700 to 3,400 feet

Mean annual precipitation: 26 to 28 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 85 to 120 days

Taxonomic class: Coarse-loamy, mixed, superactive, frigid Vitrandic Hapludalfs

Typical Pedon

Stewah ashy silt loam in an area of Reggear-Stewah complex, 10 to 35 percent slopes, about 6 miles north and 4 miles west of Potlatch, Idaho; about 1,665 feet north and 2,200 feet west of the southeast corner of section 2, T. 42 N., R. 4 W.; latitude 47 degrees, 0 minutes, 30 seconds north and longitude 116 degrees, 48 minutes, 5 seconds west, NAD 83; UTM 515101 meters east, 5206111 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 5 inches; light brownish gray (10YR 6/2) ashy silt loam, very dark brown (7.5YR 2.5/3) moist; weak very fine and fine granular structure; slightly hard, friable, nonsticky and slightly plastic; many very fine, common fine and medium, and few coarse roots; many very fine tubular pores and common very fine irregular pores; 2 percent gravel; slightly acid (pH 6.1); abrupt wavy boundary.

Bw—5 to 10 inches; pale brown (10YR 6/3) ashy silt loam, dark brown (7.5YR 3/4) moist; moderate fine and medium subangular blocky structure parting to moderate very fine and fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many very fine tubular pores; 3 percent gravel; moderately acid (pH 6.0); clear wavy boundary.

Bt1—10 to 16 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and moderately plastic; common very fine, fine, medium, and coarse roots; many very fine tubular pores and common very fine irregular pores; 5 percent faint clay films in pores; 10 percent faint silt coatings on vertical faces of peds and in pores; 5 percent gravel; slightly acid (pH 6.2); clear wavy boundary.

2Bt2—16 to 25 inches; pale brown (10YR 6/3) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and moderately plastic; common very fine and fine roots between peds; many very fine tubular pores and common very fine irregular pores; 5 percent distinct clay films in pores; 10 percent faint silt coatings on vertical faces of peds and 5 percent faint silt coatings in pores; 30 percent gravel; slightly acid (pH 6.1); clear wavy boundary.

2Bt3—25 to 40 inches; very pale brown (10YR 7/4) very cobbly silt loam, yellowish brown (10YR 5/4) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots between peds; common very fine tubular and irregular pores; 4 percent distinct clay films on vertical faces of peds and in pores; 20 percent gravel and 30 percent cobbles; slightly acid (pH 6.1); clear wavy boundary.

2C1—40 to 52 inches; light yellowish brown (10YR 6/4) extremely gravelly silt loam, dark yellowish brown (10YR 4/4) moist; massive; moderately hard, friable, nonsticky and slightly plastic; common very fine roots around fragments; common very fine tubular pores; 50 percent gravel and 20 percent cobbles; moderately acid (pH 5.9); clear wavy boundary.

2C2—52 to 59 inches; light yellowish brown (10YR 6/4) extremely cobbly silt loam, dark yellowish brown (10YR 4/4) moist; massive; moderately hard, friable, nonsticky and slightly plastic; few very fine roots around fragments; common very fine tubular pores; 30 percent gravel and 65 percent cobbles; moderately acid (pH 5.9); clear wavy boundary.

2Cr—59 to 69 inches; moderately cemented metasedimentary rock.

Range in Characteristics

Depth to paralithic bedrock: 53 to 60 inches

Depth to strongly contrasting textural stratification (Bt horizon): 10 to 20 inches

Taney Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Volcanic ash over loess

Slope range: 3 to 20 percent

Elevation: 2,560 to 3,280 feet

Mean annual precipitation: 25 to 28 inches

Mean annual air temperature: 43 to 45 degrees F

Frost-free period: 90 to 110 days

Taxonomic class: Fine-silty, mixed, superactive, frigid Vitrandic Argixerolls

Typical Pedon

Taney ashy silt loam, 8 to 20 percent slopes, about 5.5 miles west of Plummer, Idaho; about 1,875 feet north and 250 feet west of the southeast corner of section 18, T. 46 N., R. 5 W.; latitude 47 degrees, 19 minutes, 40 seconds north and longitude 117 degrees, 0 minutes, 8 seconds west, NAD 83; UTM 499776 meters east, 5241596 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; grayish brown (10YR 5/2) ashy silt loam, very dark gray (10YR 3/1) moist; weak fine subangular blocky structure parting to moderate very fine and fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine tubular pores; neutral (pH 7.3); clear wavy boundary.

BA—4 to 15 inches; brown (10YR 5/3) ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and few medium tubular pores; slightly acid (pH 6.5); gradual wavy boundary.

Bw—15 to 22 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; many very fine, common medium, and few coarse

- roots; many very fine and few fine and medium tubular pores; 1 percent very fine manganese masses; neutral (pH 6.6); gradual wavy boundary.
- Bt—22 to 29 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 3/3) moist; weak and moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and medium and few coarse roots; many very fine and fine and few medium tubular pores; 10 percent continuous faint clay films on faces of peds; 1 percent very fine manganese masses; slightly acid (pH 6.5); abrupt wavy boundary.
- EBC—29 to 31 inches; light gray (2.5Y 7/2) silt loam, light olive brown (2.5Y 5/3) moist; weak fine and medium subangular blocky structure; moderately hard, firm, slightly sticky and slightly plastic; common very fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 25 percent very fine and fine iron-manganese concretions; very strongly acid (pH 4.6); abrupt wavy boundary.
- Btcxb1—31 to 37 inches; yellowish brown (10YR 5/4) silty clay loam, brown (10YR 4/3) moist; moderate medium prismatic structure; very hard, extremely firm, moderately sticky and moderately plastic; brittle; common very fine and few fine, medium, and coarse roots between peds; many very fine and fine and few medium tubular pores; 30 percent discontinuous distinct brown (7.5YR 4/3) clay films on faces of peds, 20 percent discontinuous faint brown (10YR 4/3) clay films on faces of peds, and 10 percent discontinuous distinct clay films in pores; 15 percent very fine and fine iron-manganese concretions; very strongly acid (pH 4.7); gradual wavy boundary.
- Btcxb2—37 to 53 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 5/3) moist; weak fine and medium prismatic structure; very hard, extremely firm, moderately sticky and moderately plastic; brittle; few very fine, fine, and medium roots between peds; many very fine and fine and few medium tubular pores; 30 percent discontinuous prominent brown (7.5Y 4/3) clay films on faces of peds, 25 percent discontinuous distinct brown (10YR 4/3) clay films on faces of peds, and 15 percent discontinuous prominent clay films in pores; 20 percent discontinuous distinct light gray (10YR 7/2) silt coatings on faces of peds; 15 percent very fine iron-manganese concretions; strongly acid (pH 5.1); gradual wavy boundary.
- Btxb—53 to 60 inches; very pale brown (10YR 7/4) silty clay loam, yellowish brown (10YR 5/4) moist; weak fine and medium prismatic structure; very hard, extremely firm, moderately sticky and moderately plastic; brittle; few very fine, fine, and medium roots between peds; many very fine and fine tubular pores; 35 percent discontinuous distinct dark yellowish brown (10YR 4/4) and 15 percent discontinuous prominent brown (7.5YR 4/4) clay films on faces of peds and 20 percent discontinuous distinct clay films in pores; 15 percent discontinuous distinct light gray (10YR 7/2) silt coatings on faces of peds; 1 percent very fine iron-manganese concretions; slightly acid (pH 6.1).

Range in Characteristics

Depth to highest seasonal water table: 16 to 22 inches in February

Depth to fragipan: 23 to 40 inches

Tekoa Series

Depth class: Moderately deep to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Mountains

Soil Survey of Benewah County Area, Idaho, Western Part

Landform: Mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 10 to 65 percent

Elevation: 2600 to 3700 feet

Mean annual precipitation: 20 to 35 inches

Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Vitrandic Argixerolls

Typical Pedon

Tekoa gravelly ashy silt loam in an area of Libertybutte-Tekoa complex, 5 to 30 percent slopes, about 1.9 miles south of the Hangman Creek Road turnoff; about 850 feet north and 2,595 feet west of the southeast corner of section 7, T. 44 N., R. 5 W.; latitude 47 degrees, 9 minutes, 56 seconds north and longitude 117 degrees, 0 minutes, 44 seconds west, NAD 83; UTM 499037 meters east, 5223576 meters north, zone 11.

A1—0 to 7 inches; brown (10YR 4/3) and brown (10YR 5/3) gravelly ashy silt loam, very dark brown (10YR 2/2) and very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to moderate medium granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; common very fine and fine tubular pores; 30 percent gravel; neutral (pH 7.3); clear smooth boundary.

A2—7 to 13 inches; brown (10YR 5/3) very cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to moderate fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; common very fine and fine tubular pores and common medium irregular pores; 20 percent gravel and 20 percent cobbles; neutral (pH 7.0); clear wavy boundary.

BA—13 to 17 inches; brown (10YR 4/3) very cobbly silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to moderate fine angular blocky; slightly hard, friable, moderately sticky and moderately plastic; common very fine and fine roots; common very fine and fine tubular pores and common medium irregular pores; few faint clay films in pores; 20 percent gravel and 35 percent cobbles; slightly acid (pH 6.5); clear wavy boundary.

Bt1—17 to 27 inches; yellowish brown (10YR 5/4) and brown (7.5YR 5/4) very cobbly silty clay loam, brown (10YR 4/3 and 4/4) moist; weak medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and fine roots; common very fine and fine tubular pores and common medium irregular pores; many faint clay films on faces of peds and in pores; 20 percent gravel, 5 percent paragravel, and 25 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

Bt2—27 to 33 inches; yellowish brown (10YR 5/4) very gravelly silty clay loam, dark yellowish brown (10YR 3/4) and dark brown (10YR 3/3) moist; weak medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; common very fine and fine roots; common very fine and fine tubular pores and common medium and coarse irregular pores; many faint clay films on faces of peds and in pores; 40 percent gravel, 5 percent paragravel, and 10 percent cobbles; slightly acid (pH 6.5); clear irregular boundary.

R—33 to 43 inches; strongly cemented quartzite; fractured at 4- to 18-inch intervals.

Range in Characteristics

Depth to lithic bedrock: 29 to 40 inches

Tensed Series

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills

Landform: Hills

Parent material: Volcanic ash and loess over alluvium and colluvium derived from metasedimentary rock

Slope range: 3 to 35 percent

Elevation: 2,580 to 3,180 feet

Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 125 days

Taxonomic class: Fine-loamy, isotic, frigid Xeric Argialbolls

Typical Pedon

Tensed ashy silt loam in an area of Tensed-Pedee complex, 3 to 15 percent slopes, about 3.3 miles east of Tensed, Idaho; about 1,600 feet north and 700 feet east of the southwest corner of section 9, T. 44 N., R. 4 W.; latitude 47 degrees, 10 minutes, 3.00 seconds north and longitude 116 degrees, 51 minutes, 1.84 seconds west, NAD 83; UTM 511332 meters east, 5223795 meters north, zone 11.

Ap1—0 to 4 inches; brown (7.5YR 5/3) ashy silt loam, very dark brown (7.5YR 2.5/2) moist; moderate fine subangular blocky structure parting to strong coarse granular; slightly hard, friable, nonsticky and slightly plastic; many very fine and few fine roots; many very fine and common fine tubular pores; 2 percent fine gravel; strongly acid (pH 5.3); clear wavy boundary.

Ap2—4 to 7 inches; brown (7.5YR 5/3) ashy silt loam, very dark brown (7.5YR 2.5/3) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; common very fine and few fine roots; many very fine and common fine tubular pores; 3 percent fine gravel; strongly acid (pH 5.1); clear wavy boundary.

BA—7 to 12 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure parting to strong medium subangular blocky; slightly hard, friable, nonsticky and moderately plastic; common very fine and few fine, medium, and coarse roots between peds; many very fine and fine tubular pores; 2 percent faint clay films in pores; 5 percent fine gravel; strongly acid (pH 5.5); abrupt wavy boundary.

EB—12 to 22 inches; light yellowish brown (10YR 6/4) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; strong medium subangular blocky structure; slightly hard, friable, slightly sticky and moderately plastic; common very fine and few fine, medium, and coarse roots between peds; many very fine and fine tubular pores; 4 percent faint clay films on faces of peds and in pores; 3 percent fine faint iron-manganese masses; 10 percent fine gravel and 5 percent medium gravel; moderately acid (pH 5.7); clear wavy boundary.

E—22 to 24 inches; very pale brown (10YR 7/3) gravelly loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; few very fine, fine, medium, and coarse roots between peds; many very fine and common fine tubular pores; 25 percent distinct silt coatings on faces of peds; 5 percent fine faint iron-manganese masses and 3 percent fine faint iron depletions; 5 percent fine faint iron-manganese concretions; 10 percent fine gravel and 5 percent medium gravel; moderately acid (pH 5.8); abrupt wavy boundary.

2Bt1—24 to 36 inches; strong brown (7.5YR 5/6) very gravelly clay loam, strong brown (7.5YR 4/6) moist; moderate medium prismatic structure parting to strong medium subangular blocky; hard, very firm, very sticky and very plastic; few very fine, fine, and medium roots between peds; common very fine tubular pores; 35 percent prominent clay films on faces of peds and in pores and 5 percent prominent organoargillans in root channels; 5 percent medium faint iron-manganese masses; 3 percent fine faint iron-manganese concretions; 25 percent fine gravel, 15 percent medium gravel, and 5 percent cobbles; moderately acid (pH 5.6); gradual wavy boundary.

2Bt2—36 to 58 inches; yellowish brown (10YR 5/6) clay loam, dark yellowish brown (10YR 4/6) moist; weak coarse prismatic structure parting to moderate coarse subangular blocky; hard, very firm, moderately sticky and very plastic; few fine roots between peds; many very fine interstitial pores; 25 percent prominent clay films on faces of peds and in pores, 10 percent distinct clay films between sand grains, and 3 percent prominent organoargillans in root channels; 10 percent distinct silt coatings and 5 percent faint sand coatings on faces of peds; 5 percent medium faint iron-manganese masses; 3 percent fine faint iron-manganese concretions; 10 percent fine gravel and 2 percent medium gravel; neutral (pH 7.3); clear wavy boundary.

2Bt3—58 to 61 inches; light yellowish brown (10YR 6/4) very gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; moderately hard, firm, slightly sticky and moderately plastic; common very fine interstitial pores; 15 percent distinct clay films on faces of peds and in pores and 5 percent faint clay films between sand grains; 5 percent distinct silt coatings and 10 percent distinct sand coatings on faces of peds; 5 percent medium faint iron-manganese masses; 3 percent fine faint iron-manganese concretions; 25 percent fine gravel, 25 percent medium gravel, and 5 percent cobbles; neutral (pH 7.3).

Range in Characteristics

Depth to highest seasonal water table: 22 to 24 inches in February through April

Depth to strongly contrasting textural stratification (2Bt3 horizon): 50 to 59 inches

Thatuna Series

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 2 to 40 percent

Elevation: 2,500 to 2,850 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 100 to 140 days

Taxonomic class: Fine-silty, mixed, superactive, mesic Oxyaquic Argixerolls

Typical Pedon

Thatuna silt loam in an area of Thatuna-Naff complex, 8 to 25 percent slopes, about 5 miles south of Waverly, Washington; about 1,430 feet north and 920 feet west of the southeast corner of section 27, T. 21 N., R. 44 E.; latitude 47 degrees, 16 minutes, 41.80 seconds north and longitude 117 degrees, 13 minutes, 14.80 seconds west, NAD 83; UTM 483303 meters east, 5236112 meters north, zone 11.

- A1—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores and many fine tubular pores; neutral (pH 7.0); gradual smooth boundary.
- A2—6 to 12 inches; very dark grayish brown (10YR 3/2) silt loam, black (10YR 2/1) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores and many fine tubular pores; slightly acid (pH 6.5); gradual smooth boundary.
- AB—12 to 19 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores and many fine tubular pores; slightly acid (pH 6.5); clear smooth boundary.
- Bw—19 to 28 inches; yellowish brown (10YR 5/4) silt loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine interstitial pores and common fine tubular pores; slightly acid (pH 6.5); abrupt smooth boundary.
- E—28 to 35 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; weak coarse angular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine interstitial pores and common fine tubular pores; slightly acid (pH 6.5); clear irregular boundary.
- Btb1/E—35 to 43 inches; pale brown (10YR 6/3) and light gray (10YR 7/2) silty clay loam, grayish brown (10YR 5/2) and brown (10YR 4/3) moist; strong medium and coarse angular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; 35 percent continuous distinct clay films on faces of peds; 75 percent faint silt coatings that are grayish brown (10YR 5/2) when moist and are on faces of peds; 1 percent fine iron-manganese concretions; neutral (pH 7.3); gradual wavy boundary.
- Btb2—43 to 52 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 4/3) moist; strong coarse prismatic structure parting to moderate medium angular blocky; very hard, very firm, very sticky and very plastic; few very fine roots; few very fine tubular pores; 35 percent continuous distinct clay films on faces of peds; 18 percent fine iron-manganese concretions; neutral (pH 7.3); gradual wavy boundary.
- Btb3—52 to 60 inches; light yellowish brown (10YR 6/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; strong coarse prismatic structure; hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; 35 percent continuous distinct clay films on faces of peds; neutral (pH 7.0).

Range in Characteristics

Depth to highest seasonal water table: 24 to 36 inches in February through April

Threebear Series

Depth class: Moderately deep to a fragipan

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, basalt plateaus

Landform: Hills

Soil Survey of Benewah County Area, Idaho, Western Part

Parent material: Volcanic ash over loess

Slope range: 3 to 35 percent

Elevation: 2,800 to 3,500 feet

Mean annual precipitation: 28 to 35 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 80 to 110 days

Taxonomic class: Medial over loamy, amorphic over mixed, superactive, frigid
Oxyaquic Udivitrands

Typical Pedon

Threebear medial silt loam, 3 to 25 percent slopes, about 7 miles southwest of St. Maries, Idaho; about 2,100 feet north and 2,900 feet east of the southwest corner of section 24, T. 45 N., R. 3 W.; latitude 47 degrees, 13 minutes, 49.14 seconds north and longitude 116 degrees, 39 minutes, 33.53 seconds west, NAD 83; UTM 525789 meters east, 5230815 meters north, zone 11.

Oi—0 to 2 inches; slightly decomposed plant material.

Oe—2 to 3 inches; moderately decomposed plant material.

A—3 to 4 inches; brown (10YR 5/3) medial silt loam, dark brown (10YR 3/3) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine tubular pores; slightly acid (pH 6.3); abrupt wavy boundary.

Bw1—4 to 9 inches; yellowish brown (10YR 5/4) medial silt loam, dark yellowish brown (10YR 3/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and few medium tubular pores; slightly acid (pH 6.3); clear smooth boundary.

Bw2—9 to 20 inches; light yellowish brown (10YR 6/4) medial silt loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and few medium tubular pores; slightly acid (pH 6.3); abrupt wavy boundary.

2E/Bt—20 to 24 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist (E part); light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist (B part); weak medium and coarse prismatic structure; very hard, firm, slightly sticky and slightly plastic; brittle; few very fine and fine roots between peds; many very fine and few fine and medium tubular pores; 5 percent patchy faint clay films in pores; 5 percent faint light gray (10YR 7/2) silt coatings on faces of peds and in pores; 1 percent fine prominent black (10YR 2/1) iron-manganese masses and 1 percent fine irregular prominent strong brown (7.5YR 5/6) oxidized iron masses; about 10 percent fragic material; strongly acid (pH 5.3); clear wavy boundary.

2Btx/E—24 to 34 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist (B part); very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist (E part); moderate coarse prismatic structure; very hard, firm, slightly sticky and slightly plastic; brittle; few very fine and fine roots between peds; many very fine and few fine tubular pores; 20 percent patchy distinct and prominent clay films in pores; 25 percent distinct light gray (10YR 7/2) silt coatings on faces of peds and in pores; 1 percent fine prominent black (10YR 2/1) iron-manganese masses and 1 percent fine irregular prominent strong brown (7.5YR 5/6) oxidized iron masses; very strongly acid (pH 5.0); clear wavy boundary.

2Btx1—34 to 55 inches; very pale brown (10YR 7/4) and light brown (7.5YR 6/3) silt loam, brown (7.5YR 4/3) and yellowish brown (10YR 5/4) moist; strong very

coarse prismatic structure; very hard, very firm, slightly sticky and slightly plastic; brittle; few very fine roots between peds; many very fine and few fine tubular pores; 15 percent distinct and prominent brown (7.5YR 5/4) and dark yellowish brown (10YR 4/4) clay films on faces of peds and in pores; 10 percent distinct light gray (10YR 7/2) silt coatings on faces of peds and in pores; 1 percent fine prominent black (10YR 2/1) iron-manganese masses and 1 percent fine irregular prominent strong brown (7.5YR 5/6) oxidized iron masses; extremely acid (pH 4.3); gradual wavy boundary.

2Btx2—55 to 60 inches; light brown (7.5YR 6/3) and very pale brown (10YR 7/4) silty clay loam, brown (7.5YR 4/3) and yellowish brown (10YR 5/4) moist; moderate medium and coarse prismatic structure; very hard, firm, moderately sticky and moderately plastic; brittle; few very fine roots between peds; many very fine and few fine tubular pores; 35 percent prominent dark yellowish brown (10YR 4/4) and brown (7.5YR 4/4) clay films on faces of peds and in pores; 5 percent distinct light gray (10YR 7/2) silt coatings on faces of peds and in pores; 1 percent fine prominent black (10YR 2/1) iron-manganese masses and 1 percent fine irregular strong brown (7.5YR 5/6) oxidized iron masses; very strongly acid (pH 5.0).

Range in Characteristics

Depth to highest seasonal water table: 12 to 20 inches in February through April

Depth to fragipan: 23 to 40 inches

Thickness of ash mantle: 14 to 23 inches

Tigley Series

Depth class: Very deep

Drainage class: Well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: Foothills, mountains

Landform: Hills, mountain slopes

Parent material: Volcanic ash and loess over colluvium derived from metasedimentary rock

Slope range: 15 to 65 percent

Elevation: 2,850 to 4,200 feet

Mean annual precipitation: 30 to 35 inches

Mean annual air temperature: 42 to 46 degrees F

Frost-free period: 80 to 120 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Vitrandic Hapludalfs

Typical Pedon

Tigley gravelly ashy silt loam, moist, 15 to 35 percent slopes, about 2 miles southwest of St. Maries, Idaho; about 50 feet north and 60 feet west of the southeast corner of section 29, T. 46 N., R. 2 W.; latitude 47 degrees, 17 minutes, 51 seconds north and longitude 116 degrees, 36 minutes, 28 seconds west, NAD 83; UTM 529624 meters east, 5238328 meters north, zone 11.

Oi—0 to 1 inch; slightly decomposed plant material.

Oe—1 to 2 inches; moderately decomposed plant material.

A—2 to 4 inches; brown (10YR 5/3) gravelly ashy silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure and moderate fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine tubular pores; 15 percent gravel; slightly acid (pH 6.5); abrupt wavy boundary.

- Bw—4 to 9 inches; pale brown (10YR 6/3) gravelly ashy silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 15 percent gravel; slightly acid (pH 6.5); clear wavy boundary.
- Bt1—9 to 19 inches; very pale brown (10YR 7/3) gravelly silt loam, brown (10YR 5/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium tubular pores; 10 percent distinct clay films on faces of peds and in pores; 15 percent faint silt coatings on faces of peds; 25 percent gravel; slightly acid (pH 6.3); clear wavy boundary.
- Bt2—19 to 34 inches; very pale brown (10YR 7/3) very gravelly silt loam, brown (10YR 5/3) moist; moderate medium and coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine and fine and few medium and coarse tubular pores; 20 percent faint and distinct clay films on faces of peds and in pores; 15 percent distinct silt coatings on faces of peds; 45 percent gravel; slightly acid (pH 6.1); clear wavy boundary.
- Bt3—34 to 51 inches; very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) moist; weak and moderate coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine and fine and few medium and coarse tubular pores; 20 percent distinct clay films on faces of peds and 10 percent faint clay films in pores; 15 percent distinct silt coatings on faces of peds; 50 percent gravel and 5 percent cobbles; moderately acid (pH 6.0); gradual wavy boundary.
- Bt4—51 to 60 inches; very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) moist; weak and moderate coarse subangular blocky structure; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine and few medium tubular pores and few coarse interstitial pores; 30 percent distinct clay films on faces of peds and 20 percent faint clay films in pores; 20 percent distinct silt coatings on faces of peds; 35 percent gravel and 10 percent cobbles; moderately acid (pH 6.0).

Tilma Series

Depth class: Very deep

Drainage class: Moderately well drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately low

Landscape: Basalt plateaus

Landform: Hills

Parent material: Loess

Slope range: 2 to 20 percent

Elevation: 2,500 to 2,900 feet

Mean annual precipitation: 18 to 23 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 140 days

Taxonomic class: Fine, mixed, superactive, mesic Xeric Argialbolls

Typical Pedon

Tilma silt loam in an area of Naff-Tilma complex, 3 to 20 percent slopes, about 1.5 miles east of Tekoa, Washington; about 560 feet south and 560 feet west of the northeast corner of section 25, T. 45 N., R. 6 W.; latitude 47 degrees, 13 minutes,

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11.50 seconds north and longitude 117 degrees, 1 minutes, 31.60 seconds west, NAD 83; UTM 498074 meters east, 5229597 meters north, zone 11.

- Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak very fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine interstitial pores; 5 percent faint silt coatings; moderately acid (pH 6.0); abrupt smooth boundary.
- A—8 to 14 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores; slightly acid (pH 6.1); clear smooth boundary.
- Bw—14 to 20 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium prismatic structure parting to weak medium subangular blocky; hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine and common fine tubular pores; 6 percent faint silt coatings on faces of peds; 3 percent distinct organic stains on faces of peds; slightly acid (pH 6.2); abrupt smooth boundary.
- E—20 to 23 inches; light gray (10YR 7/2) silt loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots; few very fine tubular pores; 1 percent fine prominent black (10YR 2/1) iron-manganese concretions; slightly acid (pH 6.4); abrupt smooth boundary.
- Btb1—23 to 30 inches; light yellowish brown (10YR 6/4) and brown (7.5YR 5/3) silty clay, brown (7.5YR 4/3) moist; strong medium columnar structure parting to weak medium and coarse subangular blocky; extremely hard, extremely firm, very sticky and very plastic; few very fine and fine roots; many very fine tubular pores; 70 percent continuous distinct clay films on faces of peds; 20 percent fine prominent black (10YR 2/1) iron-manganese concretions; moderately acid (pH 6.0); abrupt smooth boundary.
- Btb2—30 to 34 inches; light yellowish brown (10YR 6/4) and brown (10YR 5/3) silty clay, brown (7.5YR 5/3) moist; moderate medium prismatic structure; very hard, very firm, very sticky and very plastic; few fine roots; common very fine tubular pores; 70 percent continuous distinct clay films on faces of peds; 20 percent fine prominent black (10YR 2/1) iron-manganese concretions; slightly acid (pH 6.1); abrupt smooth boundary.
- Btb3—34 to 42 inches; brown (10YR 5/3) and light yellowish brown (10YR 6/4) silty clay, brown (7.5YR 4/3 and 5/3) moist; strong medium subangular blocky structure; very hard, very firm, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; 70 percent continuous distinct clay films on faces of peds; 20 percent fine prominent black (10YR 2/1) iron-manganese concretions; slightly acid (pH 6.1); abrupt smooth boundary.
- Btb4—42 to 60 inches; very pale brown (10YR 7/3) and light yellowish brown (10YR 6/4) silt loam, brown (7.5YR 5/3) and yellowish brown (10YR 5/4) moist; weak medium prismatic structure parting to strong fine and medium angular blocky; extremely hard, extremely firm, slightly sticky and slightly plastic; brittle; common very fine tubular pores; 70 percent continuous distinct clay films on faces of peds; 20 percent fine prominent black (10YR 2/1) iron-manganese concretions; neutral (pH 6.8).

Range in Characteristics

Depth to highest seasonal water table: 18 to 30 inches in December through April

Depth to strongly contrasting textural stratification (Btb horizon): 21 to 31 inches

Typic Fluvaquents

Depth class: Very deep

Drainage class: Very poorly drained

Capacity of the most limiting soil layer to transmit water (Ksat): Moderately high

Landscape: River valleys

Landform: Depressions, flood plains

Parent material: Mixed alluvium

Slope range: 0 to 2 percent

Elevation: 2,150 to 2,250 feet

Mean annual precipitation: 26 to 32 inches

Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 90 to 120 days

Taxonomic class: Typic Fluvaquents

Typical Pedon

Typic Fluvaquents silt loam in an area of Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes, about 1,600 feet south and 2,050 feet west of the northeast corner of section 23, T. 46 N., R. 2 W.; latitude 47 degrees, 19 minutes, 9.95 seconds north and longitude 116 degrees, 34 minutes, 29.30 seconds west, NAD 83; UTM 532133 meters east, 5240750 meters north, zone 11.

A1—0 to 4 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to moderate medium and coarse granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and common medium tubular pores; slightly acid (pH 6.3); gradual wavy boundary.

A2—4 to 9 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to strong fine and medium granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium, and few coarse roots; many very fine and fine and common medium tubular pores; 1 percent gravel; slightly acid (pH 6.3); clear wavy boundary.

Cg1—9 to 15 inches; gray (10YR 6/1) silt loam, dark gray (10YR 4/1) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine and fine and few medium roots; many very fine and fine and common medium and coarse tubular pores; 25 percent fine prominent strong brown (7.5YR 4/6) masses of oxidized iron and 1 percent fine faint gray (10YR 5/1) iron depletions lining pores; 3 percent gravel; moderately acid (pH 6.0); clear wavy boundary.

Cg2—15 to 27 inches; grayish brown (2.5Y 5/2) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine and few medium roots; common very fine and fine, common medium, and few coarse tubular pores; 15 percent fine prominent strong brown (7.5YR 4/6) masses of oxidized iron and 1 percent fine faint gray (10YR 5/1) iron depletions lining pores; 3 percent gravel; strongly acid (pH 5.3); abrupt smooth boundary.

2Cg3—27 to 60 inches; grayish brown (10YR 5/2) extremely cobbly fine sandy loam, very dark brown (10YR 2/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine, fine, and medium tubular pores and few coarse irregular pores; 5 percent fine prominent strong brown (7.5YR 4/6) masses of oxidized iron and 1 percent fine faint gray (10YR 5/1) iron depletions lining pores; 30 percent gravel and 60 percent cobbles; strongly acid (pH 5.3).

Range in Characteristics

Depth to highest seasonal water table (protected areas): 4 to 18 inches in February through June

Flooding (protected areas): Occasional, brief periods in February through June

Depth to strongly contrasting textural stratification (2Cg horizon): 25 to 35 inches

Formation of the Soils

By Allyson Young, soil scientist, Natural Resources Conservation Service.

Soil is a natural, three-dimensional body on the earth's surface. Although there are many different soils, each one is a result of the interaction of five soil-forming factors. These factors are parent material; climate; living organisms; relief, or topography; and time. The interaction of these factors produces a soil profile with unique qualities that can be observed and characterized.

Soils are characterized by a vertical sequence of layers, or horizons, that vary in color, texture, structure, and other physical, chemical, and biological properties. The combination of soil properties varies within short distances; consequently, the soils that form differ in fertility, productivity, and physical and chemical characteristics.

Parent Material

Parent material is the unconsolidated mineral or organic matter from which soils form. The parent material in this survey area includes residuum, colluvium, alluvium, and eolian material.

Residuum is unconsolidated, weathered, or partially weathered mineral material that accumulates as a result of the disintegration of bedrock in place. Colluvium is the unconsolidated, unsorted soil material and rock fragments that are transported or deposited on side slopes and at the base of slopes by mass movement. Alluvium is material transported and deposited by water, and it generally is of local origin in the survey area. Eolian material is transported and deposited by wind.

These types of parent material and the potential weathering products determine, to a large extent, soil development and expression. Many of the soils in the survey area formed in more than one kind of parent material.

Residuum and Colluvium

Metasedimentary and igneous rock are two types of bedrock in the survey area. The three main types of metasedimentary rock are quartzite, argillite, and siltstone from the Belt Series of the Precambrian. They commonly are highly fractured. The soils that formed in these types of rock commonly have a high percentage of coarse fragments. Examples are soils of the Ardenvoir, Honeyjones, and Lotuspoint series. These soils have loess and volcanic ash in the upper part of the profile, and they are mainly on mountain slopes and foothills.

The igneous rock is from the Miocene basalt flows of the Columbia River Group, specifically Grand Ronde Basalt and Wanapum Basalt Formations. This type of rock is in canyons and on escarpments and structural benches of basalt plateaus. In stable areas, the structural benches are covered with thick deposits of loess. Soils of the Reggear series are typical on these landforms. In canyon and on escarpments, the surficial deposits have been eroded away and the basalt is close to the surface. Soils of the Blinn, Bobbitt, and Lacy series are in these areas. These soils have a high content of basalt fragments mixed with thin deposits of loess and volcanic ash in the upper part.

Alluvium

Alluvium in the survey area consists of stratified, fine-textured material, such as silt and clay, and coarse-textured material, such as sand, gravel, and cobbles. The characteristics of the alluvium depend on the velocity and volume of the floodwaters and on the soils and geology of the adjacent upland areas. The soils that formed in alluvium commonly have stratified textures as a result of variations in the velocity of the floodwater during deposition.

Recent alluvium is on the flood plains and terraces of rivers and streams in the survey area. The major watersheds are the western part of the St. Joe River Valley and the tributaries associated with Benewah, Minnaloosa, Moctileme, and Hangman Creeks.

In areas where floodwaters moved slowly, silt and fine sand were deposited on the flood plain of the St. Joe River Valley. Soils of the Bellslake, Miesen, and Ramsdell series formed in this sediment. Soils of the Lovell and Porrett series are typical of those on the flood plains and terraces of Benewah and Minnaloosa Creek areas. The surface layer of these soils is ashy silt loam, and the subsoil is silty clay loam. Soils of the Lovell series are in the upper part of the Hangman and Moctileme Creek areas, and those of the Cald and Latahco series are in the lower part of these areas. The Cald and Latahco soils formed in silty alluvium from the surrounding Palouse Prairie and loess hills. The surface layer of these soils is silt loam, and the subsoil is silty clay loam.

Between episodes of basalt flows and deposition, long intervals of time elapsed during which stream drainageways were established and soil formation processes occurred. Soils formed in Tertiary material that consists of both older alluvial deposits and weathered material from flood basalt and older geologic units. Soils of the Tensed and Pedee series formed in Tertiary alluvium on hills and foothills. Soils of the Benewah, Kingspeak, and Rasser series formed in Tertiary alluvium on hills, foothills, and structural benches.

Eolian Material

Two types of eolian material are in the survey area, including Pleistocene and Holocene loess and volcanic ash.

Loess is composed of silt-sized particles. A significant source of loess is the sediment produced by a series of outburst floods from Glacial Lake Missoula during the Pleistocene. In many separate events, glacial meltwater sediment was deposited in the Columbia Basin and was subsequently eroded and re-transported by wind. The silt-sized sediment was re-deposited as thick layers of loess across the rolling hills and Palouse Prairie region of the survey area. Each episode of deposition was followed by a period of stability and soil formation; therefore, some of the soils that formed in loess are relict Paleosols.

The soils that formed in these loess deposits are very deep. The surface layer is silt loam, and the subsoil is silt loam, silty clay loam, or silty clay. Soils of the Naff, Southwick, Taney, and Thatuna series are in the Palouse Prairie region and on hills.

Volcanic ash is composed of very fine sand- and silt-sized particles. It originated from the volcanoes in the Cascade Range and was transported by wind to the survey area. The most significant contribution of ash was from the eruption of Mount Mazama about 7,000 years ago, the cone of which is now Crater Lake in Oregon. The Mount St. Helens eruption in 1980 deposited relatively minor amounts of ash in the survey area.

The Mazama ashfall was the only volcanic ash deposition to significantly affect soil formation in the survey area. It was deposited over the entire area, but it has been eroded from landforms that do not have tree cover. Soils of the Honeyjones, Huckle, Pinecreek, and Threebear series formed in thick deposits of volcanic ash.

Relief

Relief, or topography, is determined primarily by the history of geologic episodes in the survey area. Topography influences soil formation through factors such as drainage of air and water, steepness and shape of slope, and aspect.

Palouse and Nez Perce Prairies (MLRA 9) Foothills and Basalt Plateaus

The Palouse Prairie region and hills are characterized by very gently sloping to strongly sloping topography. Slopes range from 5 to 35 percent. The very deep soils formed in multiple layers of loess deposited during the late Pleistocene. The soils commonly have a seasonal perched water table due to the well-developed subsoil that impedes vertical movement of water.

The Palouse Prairie is in the western part of the survey area, mostly west of Highway 95, between Moctileme Creek and the foothills of McCroskey State Park. The soils on the Palouse Prairie are at an elevation of 2,300 to 2,900 feet. This area is characterized by mesic-xeric vegetation types that historically consist dominantly of grasses and shrubs. The vegetation has contributed organic matter to the soils, and a thick mollic epipedon has developed. Examples are soils of the Naff, Palouse, and Thatuna series, which are Mollisols.

The Naff and Thatuna soils have a buried argillic horizon, or a paleosol. The Thatuna soils commonly are on north-facing backslopes and footslopes and receive more moisture from snowmelt; thus, they have a seasonal perched water table and a pronounced leached eluvial horizon. The Palouse soils formed in areas where the paleosol is buried more deeply and only a cambic horizon has formed in the more recent loess deposits.

Beyond the Palouse Prairie area, precipitation increases and the native vegetation is dominantly shrubs and conifers. This part of the survey area is referred to as the cutover loess hills region. The western part of this region is characterized by mesic-xeric vegetation, such as ponderosa pine and snowberry shrub. The soils are at an elevation of 2,500 to 3,100 feet. Soils of the Driscoll, Larkin, and Southwick series are in the relatively warm, dry part of this region. These soils are classified as Mollisols.

The Southwick soils are typically on concave or north-facing backslopes and footslopes. They have a sequence of horizons similar to that of the Thatuna soils, and they have a seasonal perched water table. The Southwick soils, however, have an argillic horizon with fragic properties, particularly high bulk density and prismatic structure. The Larkin soils are commonly on west- and south-facing backslopes and footslopes. They have a well-developed argillic horizon. The Driscoll soils are on convex summits and shoulders. They are characterized by a pronounced paleosol relatively close to the surface. The paleosol impedes water movement; therefore, these soils have a seasonal perched water table.

The part of this region at the higher elevations is relatively cooler and is characterized by frigid-xeric vegetation types, such as Douglas-fir and grand fir with an understory of ninebark shrub. The soils on the frigid loess hills are at an elevation of 2,500 to 3,300 feet. Soils of the Carlinton, Santa, Setters, and Taney series are in the cooler, more moist areas. The surface layer of the Carlinton, Santa, and Taney soils has sufficient volcanic ash to meet the criteria for the Vitrandic subgroup.

The Taney and Setters soils are associated with the Douglas-fir/ninebark habitat type. These soils are classified as Mollisols. The Taney soils generally are on concave or north-facing slopes, and they have a horizon sequence similar to that of the Southwick soils, including a pronounced eluvial horizon. The Taney soils, however, have a root-restricting fragipan in the argillic horizon. The Setters soils are on summits, shoulders, and convex backslopes. They are similar to the Driscoll soils in that they have a paleosol relatively close to the surface.

The Carlinton and Santa soils are associated with the grand fir/ninebark habitat type. These soils have an ochric epipedon, a well-developed argillic horizon, and a fragipan in the subsoil. They are classified as Vitrandic Fragixeralfs. These soils are very similar, but the Carlinton soils have a higher content of clay above the fragipan. The fragipan restricts vertical water movement; therefore, these soils have a seasonal perched water table.

Northern Rocky Mountains (MLRA 43A) Mountains and Foothills

Due to past tectonic activity, the mountains have steep slopes and narrow ridges. Slopes are as much as 75 percent. Some ridges are broad and have slopes of 5 to 25 percent. The steepness and shape of the slope impact the depth to bedrock, amount of rock fragments, and development of soil horizons. Soils on steep, convex slopes typically have a higher content of rock fragments, are shallower to bedrock, and have less distinct soil horizons. The Cassyhill and Lotuspoint series are examples of shallow and moderately deep to bedrock, skeletal soils on convex slopes. Soils of the McCrosket and Pinecreek series are examples of deep and very deep to bedrock, skeletal soils on concave slopes.

The soils on the mountains are at an elevation of 3,300 to 4,900 feet. All aspects of the mountain slopes at the higher elevations have a thick deposit of volcanic ash. Soils such as those of the Honeyjones and Pinecreek series formed in these deposits. These soils are classified as Andisols. The Honeyjones soils are on north-facing mountain slopes, which receive less direct sunlight, have colder soil temperatures, and retain moisture longer. The Pinecreek soils are on south-facing slopes, which are warmer and drier. These aspect-related differences result in different plant communities, and they influence soil chemistry. The Honeyjones soils have a light-colored ochric epipedon and are more leached of exchangeable bases than are the Pinecreek soils, which have a darker-colored mollic epipedon.

Soils on the foothills typically are less sloping than those on the mountains. They are at an elevation of about 2,600 to 3,400 feet. Most of these soils are deeper to bedrock, and they have more developed horizons. Soils of the Benewah and Rasser series are very deep with a thicker loess deposit over a well-developed, clay-enriched argillic horizon. Soils of the Arson series are similar to the Rasser soils, but the Arson soils are on the steeper and more convex slopes of the foothills and are deep to bedrock.

Soils on the lower elevation mountain slopes and foothills have a thick deposit of volcanic ash on north-trending slopes. Soils such as those of the Arson, Benewah, and Rasser series (Vitrandic Haploxeralfs) are on east- to west-trending slopes. These soils have an admixture of volcanic ash and loess in the upper part, and they meet the criteria for the Vitrandic subgroup.

Northern Rocky Mountains (MLRA 43A) Basalt Plateaus

The soils on the basalt landforms are at elevations of 2,100 to 3,100 feet. The canyonsides and escarpments have steep slopes that range to 70 percent. The steepness and shape of the slope and the aspect affect the depth to bedrock, content of rock fragments, and development of soil horizons.

Soils of the Dorb series are on concave, north-facing slopes, have an ochric epipedon, have a thick layer of volcanic ash over colluvium, and are deep to bedrock. Soils of the Shayhill series typically are on north- and east-facing slopes, have an admixture of ash and loess in the upper part over basalt colluvium and residuum, have a well-developed argillic horizon, and are very deep.

Soils of the Agatha and Blinn series are skeletal and typically are on steep, east- and west-trending slopes of canyonsides and escarpments. Agatha soils are deep to bedrock and have an argillic horizon. Blinn soils are typically on the more convex part of the slope, are moderately deep, and have a weakly developed cambic horizon.

Soils of the Bobbitt and Lacy series are skeletal and are on west- and south-facing canyonsides and escarpments, commonly near areas of Rock outcrop. Bobbitt soils are moderately deep to bedrock, and Lacy soils are shallow to bedrock. Both soils have a dark-colored surface horizon and high base saturation due to the content of organic matter from the grass-shrub understory. These soils are classified as Mollisols.

As compared to the canyonsides and escarpments, the structural benches on the basalt plateaus have lower slope gradients. The structural benches are more stable surfaces with relatively thick deposits of loess. The Seddow soils are deep to bedrock and generally are in the convex areas of the structural benches. The Kingspeak soils formed in very deep loess and generally are in the concave areas of the structural benches. Both soils have an admixture of loess and ash in the upper part and have a well-developed argillic horizon.

River Valleys and Drainageways

The flood plains and terraces on the river valley floors are level to nearly level. Because of the level topography, water accumulates on these landforms and drainage is poor. The lack of drainage results in a high water table, flooding, or ponding. Soils that have poor drainage commonly have redoximorphic features due to the oxidation, reduction, and translocation of organic matter, iron, and manganese.

The St. Joe River Valley is subject to occasional or frequent periods of flooding; therefore, the flood plain is a young geomorphic surface with soils that exhibit weak development. Elevation is 2,120 to 2,150 feet. Soils of the Miesen and Ramsdell series formed in silty alluvium, have an ochric epipedon, and a cambic horizon. These soils have sufficient volcanic ash in the upper part to meet the criteria for the Vitrandic subgroup. Soils of the Bellslake series are in depressions of the flood plains and formed in stratified silty alluvium over organic material.

The majority of the Lovell and Porrett soils are in the drainageways and flood plains of Benewah and Minaloosa Creeks and near the upper part of Mottileme and Hangman Creeks. Elevation is 2,200 to 3,000 feet. The Lovell and Porrett soils formed in alluvium derived from loess with an influence of volcanic ash in the upper part. These soils have an ochric epipedon and a well-developed argillic horizon.

In the western part of the survey area, the soils on the valley floors formed in alluvium derived from localized loess. Soils of the Cald, Latah, and Latahco series are on flood plains and terraces of low-gradient drainageways at an elevation of 2,300 to 2,800 feet. These soils have a high content of organic matter, a thick mollic epipedon, and a buried argillic horizon.

Climate

Climate affects the weathering of rock and minerals (parent material), the activity of living organisms (plants and animals), and the movement of water through the soil. Temperature and precipitation affect the kind and amount of vegetation, the accumulation and decomposition of organic matter, the chemical and physical transformation of soil minerals, and the development of soil horizons.

The climate in the soil survey area is generally subhumid with warm, dry summers and cold, wet winters. The mountainous areas have cooler summers and colder winters than do the valley areas. Differences in the amount of rainfall and the temperature are associated with differences in elevation and longitude.

In general, rainfall decreases and temperature increases from the eastern part of the survey area to the western part. The average annual precipitation at Saint Maries is 30 inches, and the average annual precipitation at the Benewah County-Washington State line is 20 inches. The average annual temperature in the survey area is 47 degrees F, but the average temperature in the mountainous areas may be as low as 38 degrees.

The climate in the western part of the survey area is warmer and drier, and the native vegetation is dominantly grasses and shrubs. Decomposing grass roots contribute to the high content of organic matter in the soils. The soils in the Palouse Prairie region formed in grassland under a xeric soil moisture regime. These soils have a dark-colored mollic epipedon and a high content of organic matter and exchangeable bases.

The colder and moister part of the survey area supports dominantly conifers and shrubs, which commonly contribute a lower amount of organic matter to the soils. The soils in these areas typically have a light-colored ochric epipedon and a low content of exchangeable bases. These soils formed under a xeric or udic soil moisture regime.

Living Organisms

Living organisms play an essential role in soil formation. Plant roots, rodents, insects, worms, and microbes physically and chemically break down rock and soil minerals, affecting the weathering and accumulation of parent material. Plants decompose and organic matter accumulates on the soil surface, affecting the development and differentiation of soil horizons.

Soils in the warmer, drier part of the survey area formed under grasses, which contribute a considerable amount of organic matter to the soil ecosystem. Microbes are very active in these soils, and this activity promotes aggregate structure, microporosity, and tilth. Macrofaunal activity, such as burrowing, creates channels for air and water movement. Soil properties, such as structure, porosity, and permeability, are important for productive agricultural land.

Living organisms in the coniferous forests are active in the decomposition of woody material. This promotes sequestration of carbon compounds in the soil. Aquatic plants and hydrophytes grow in the wetland areas of the river and stream valleys. Decomposition of these plants provides an important source of organic carbon.

Time

Time is an important factor in soil formation because the degree of horizonation in soils depends in large part on the length of time the soils have been exposed to weathering. In general, soils with minimal horizonation are considered to be young and those with strongly expressed horizons are considered to be old.

Relatively young soils are on dynamic landforms with recently accumulated parent material, such as alluvium on flood plains. Older soils, such as the paleosols that formed in the Palouse Prairie region and on hills, are on more stable landforms. The parent material on these landscapes has been in place for thousands of years.

Soils in the mountains, foothills, and canyons vary in the degree of development. Soils on the very steep slopes tend to be younger because soil material is lost due to geologic erosion nearly as quickly as it forms. Soils on more stable (less steep) slopes or in concave areas are less susceptible to erosion. These soils have had more time to accumulate organic matter and to develop an argillic horizon.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the “National Soil Survey Handbook” (available in local offices of the Natural Resources Conservation Service or on the Internet).

ABC soil. A soil having an A, a B, and a C horizon.

Abrupt textural change. A soil horizon boundary or thin transitional zone characterized by a considerable increase in clay that occurs at the contact between a surface layer, subsurface layer, subsoil, or substratum.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Albic horizon. An eluvial horizon that is at least 1 centimeter thick or more. The color of the soil material is largely determined by the color of primary sand and silt particles rather than by the color of their coatings.

Alluvial fan. A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha,alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Andic soil properties. A collection of physical and chemical properties that define the criteria for the Andisol order.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Ash (volcanic). Unconsolidated, pyroclastic material less than 2 millimeters in all dimensions; commonly called volcanic ash.

Ashy (family particle-size class). A substitute class term used for the family particle-size in mineral soils.

Ashy (textural modifier; for example, ashy sandy loam). A term used to describe material in which the fine-earth fraction has 30 percent or more particles that are

0.02 to 2.0 millimeters in diameter. Of this, 5 percent or more is volcanic glass and the ammonium oxalate extractable aluminum plus $\frac{1}{2}$ the ammonium oxalate extractable iron times 60 added to the percentage of volcanic glass are equal to or more than 30.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Aspect, north. All compass directions with a northerly aspect, including west-northwest, northwest, north-northwest, north, north-northeast, northeast, and east-northeast. North aspects have less solar radiation than south aspects and consequently are cooler and more moist.

Aspect, south. All compass directions with a southerly aspect, including east-southeast, southeast, south-southeast, south, south-southwest, southwest, and west-southwest. South aspects have more solar radiation than north aspects and consequently are warmer and more droughty.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate.....	6 to 9
High	9 to 12
Very high.....	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Basalt. A fine-grained, dark-colored extrusive igneous rock composed primarily of calcic plagioclase and pyroxene, with or without olivine.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Basin. A low area in the earth's crust, of tectonic origin, in which sediment has accumulated.

Batholith. A large, domed mass of intrusive igneous rock such as granite.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

- Brush management.** Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.
- Bulk density.** The mass of soil per unit bulk volume. Moist bulk density refers to the oven-dry weight of a given volume of soil with moisture content at or near field moisture capacity.
- Butte.** An isolated, generally flat-topped hill or mountain with relatively steep slopes and talus or precipitous cliffs and characterized by summit width that is less than the height of bounding escarpments; commonly topped by a caprock of resistant material and representing an erosion remnant carved from flat-lying rocks.
- Cable yarding.** A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.
- Calcium carbonate equivalent.** The quantity of carbonates (CO_3) in the soil, expressed as CaCO_3 and as a percentage by weight of the fraction less than 2 millimeters in size.
- Cambic horizon.** A mineral soil horizon that is loamy very fine sand or finer textured and has soil structure rather than rock structure. The cambic horizon contains some weatherable minerals, and it is characterized by alterations or removals as indicated by redoximorphic features or by stronger chroma or redder hue than that of the underlying horizons.
- Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- Canyon.** A long, deep, narrow valley with high, precipitous walls in an area of high local relief.
- Canyonland (general landscape).** A deeply dissected landscape composed dominantly of relatively narrow flood plains or valley floors, commonly with considerable outcroppings of bedrock on steep slopes, ledges, or cliffs and with broad summits or interfluves.
- Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
- Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.
- Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity.** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- Channery soil material.** Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a chanter.
- Chemical treatment.** Control of unwanted vegetation through the use of chemicals.
- Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.
- Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- Clay depletions.** See Redoximorphic features.

- Clay film.** A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.
- Claypan.** A dense, compact subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.
- Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
- Coarse textured soil.** Sand or loamy sand.
- Coarse-loamy.** A loamy particle-size class that is 15 percent or more fine sand or coarser, including fragments as much as 3 inches in diameter, and is less than 18 percent clay in the fine-earth fraction.
- Coarse-silty.** A loamy particle-size class that is less than 15 percent fine sand or coarser, including fragments as much as 3 inches in diameter, and is less than 18 percent clay in the fine-earth fraction.
- Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.
- Cobbly soil material.** Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- COLE (coefficient of linear extensibility).** See Linear extensibility.
- Colluvium.** Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (for example, direct gravitational action) and by local, unconcentrated runoff.
- Commercial forest land.** Land suitable for producing timber crops and restricted from timber production by statute or administrative regulation. Federal land management agencies minimum level of productivity commonly is set
- Compaction.** The increase in soil bulk density as a result of applied loads or pressure. Compaction reduces porosity, water infiltration, and root penetration.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** See Redoximorphic features.
- Coniferous.** Pertaining to plants of the *Coniferales* order of the *Gymnospermae* subdivision. Coniferous plants have cone fruit and are commonly, but not always, evergreen. Examples include ponderosa pine, Douglas-fir, and western larch.
- Conservation cropping system.** Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when

subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Consociation. A kind of soil map unit that is dominantly a single soil or miscellaneous area and similar soils.

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Creep. Gradual downslope movement of soil material. It is caused by gravity but is facilitated by saturation of the material with water and by alternate freezing and thawing.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cryic. A soil temperature regime in which the mean annual soil temperature at a depth of 20 inches ranges from 33 to 46 degrees F. The mean summer soil temperature is less than 47 degrees for soils that have an O horizon, and it is less than 59 degrees for soils that do not have an O horizon.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Depression. Any relatively sunken part of the earth's surface, especially a low-lying area surrounded by higher ground, that has few, if any, surface drainage outlets.

Diagnostic horizons. Combinations of specific soil characteristics that are indicative of certain classes of soils. Those that occur at the soil surface are called epipedons, and those that occur below the soil surface are called diagnostic subsurface horizons.

- Dissimilar soils.** Soils that behave differently and require different management than the named soils and similar soils in a map unit.
- Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.
- Divided-slope farming.** A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.
- Drainage class (natural).** Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained*. These classes are defined in the “Soil Survey Manual.”
- Drainage, surface.** Runoff, or surface flow of water, from an area.
- Drainageway.** A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.
- Draw.** A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.
- Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.
- Ecological site.** An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.
- Effervescence.** The gaseous response exhibited as bubbles on the soil ped when drops of dilute (1:10) hydrochloric acid (HCl) are applied. This response typically indicates the presence of calcium carbonates (CaCO₃).
- Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.
- Eolian deposit.** Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.
- Ephemeral stream.** A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.
- Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.
- Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building

up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan remnant. A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Fine-loamy. A loamy particle-size class that is 15 percent or more fine sand or coarser, including fragments as much as 3 inches in diameter, and is 18 to 34 percent clay in the fine-earth fraction.

Fine-silty. A loamy particle-size class that is less than 15 percent fine sand or coarser, including fragments as much as 3 inches in diameter, and is 18 to 34 percent clay in the fine-earth fraction.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Foothills. A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

- Footslope.** The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb.** Any herbaceous plant not a grass or a sedge.
- Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- Forestland.** Land on which the historic vegetation was dominated by a 25 percent overstory canopy cover of trees, as determined by crown perimeter-vertical projection. A tree is defined as a woody-stemmed plant that can grow to 4 meters (about 13 feet) in height at maturity.
- Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- Fragmental.** A particle-size class used to classify mineral soils that have less than 10 percent by volume fine-earth soil material.
- Frigid.** A soil temperature regime in which the mean annual soil temperature at a depth of 20 inches ranges from 33 to 46 degrees F. The mean summer soil temperature is more than 47 degrees for soils that have an O horizon. The difference between the mean winter soil temperature and the mean summer soil temperature is more than 9 degrees F.
- Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- Geomorphic surface.** A mappable area of the earth's surface that has a common history; the area is of similar age and is formed by a set of processes during an episode of landscape evolution.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- Granite.** A coarse-grained igneous rock consisting mainly of quartz and feldspar, with more orthoclase than plagioclase. (See Granodiorite.)
- Granitic.** Term generally applied to granite or granitelike rock. It is used when referring to granite, granodiorite, quartz monzonite, quartz diorite, diorite, and granitic gneiss.
- Granitic gneiss.** A crystalline, banded metamorphic rock of granitic composition.
- Granodiorite.** A coarse-grained igneous rock consisting mainly of quartz and feldspar, with more plagioclase than orthoclase. (See Granite.)
- Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Grazing system, planned.** A system for managing rangeland in which three or more fields are alternately grazed and then rested in a planned sequence for a period of years.

- Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Gully.** A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.
- Habitat type.** The collective area occupied by a single plant association. It is defined and described on the basis of the vegetation and its associated environment.
- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- Hardpan.** A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.
- Head slope** (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.
- Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- Hill.** A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.
- Hillslope.** A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.
- Histic epipedon.** A thin, organic soil horizon that is saturated with water at some time during the year unless it is artificially drained. This horizon is at or near the surface of a mineral soil. It contains more than 12 percent organic carbon.
- Historic climax plant community.** The plant community that was best adapted to the unique combination of factors associated with the ecological site. It was in a natural dynamic equilibrium with the historic biotic, abiotic, and climatic factors on its ecological site in North America at the time of European immigration and settlement.
- Holocene.** The epoch of the Quaternary period of geologic time, extending from the end of the Pleistocene (about 10,000 to 12,000 years ago) to the present.
- Horizon, soil.** A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Consolidated bedrock beneath the soil that has an extremely weakly cemented to moderately cemented rupture-resistance class.

R horizon.—Consolidated bedrock beneath the soil that has a strongly cemented or stronger rupture-resistance class.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential.

The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Indurated. Refers to having a hard, brittle consistency as a result of particles being held together by cementing substances such as silica, calcium carbonate, and iron. An indurated layer can be broken by a sharp blow of a hammer.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron accumulations. See Redoximorphic features.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops.

Knoll. A small, low, rounded hill rising above adjacent landforms.

Krotovinas. Irregular tubular streaks within one layer of soil material transported from another layer. They are caused by the filling of tunnels made by burrowing animals.

Ksat. See Saturated hydraulic conductivity.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Lamella. A thin, discontinuous or continuous, generally horizontal layer of fine material (especially clay and iron oxides) that has been pedogenically concentrated (illuviated) within a coarser (e.g., sandy), eluviated layer.

Landform. Any physical, recognizable form or feature on the earth's surface that has a characteristic shape and range in composition and is produced by natural causes; it can span a wide range in size. Landforms provide an empirical description of similar portions of the earth's surface.

Landscape (soils). An assemblage, group, or family of spatially related, natural landforms over a relatively large area; the land surface which the eye can comprehend in a single view.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Leeward. Being in or facing the direction toward which the wind is blowing.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change

for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Lithic contact. A boundary between soil and coherent underlying material, typically bedrock. The bedrock has a cementation class of strongly cemented or stronger and is typically referred to as an R horizon.

Lithologic discontinuity. A significant change in particle-size distribution or mineralogy that indicates a difference in the material from which the soil horizons have formed.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loamy-skeletal. A particle-size class in which rock fragments 2 millimeters in diameter or larger make up 35 percent or more by volume. The fine-earth fraction is loamy.

Loess. Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Major land resource area (MLRA). A broad geographic land area characterized by a particular pattern of soils, geology, climate, water resources, and land use. An area is typically continuous, but small separate areas can occur.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Mature forest stage. A forest successional stage in which the most shade-tolerant adapted tree species are well represented (more than 50 percent composition) and are dominant in the middle to upper canopy layers. Trees generally are more than 9 inches in diameter at breast height, and the canopy cover is more than 25 percent.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medial (family particle-size class). A substitute class term used for the family particle-size class in mineral soils.

Medial (textural modifier, such as medial loam). A USDA textural modifier used in conjunction with a USDA mineral soil texture to indicate unique physical and chemical properties. The properties are defined in Soil Taxonomy and are typically low bulk density, high content of iron and aluminum, and high retention of phosphate.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mesic. A soil temperature regime in which the mean annual temperature at a depth of 20 inches ranges from 47 to 58 degrees F. The difference between the mean winter soil temperature and the mean summer soil temperature is more than 9 degrees F.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Metasedimentary rock. A sedimentary rock that has been subject to metamorphic processes. The degree of metamorphic alteration is not implied by the term.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

- Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- Miscellaneous area.** A kind of map unit component that has little or no natural soil and supports little or no vegetation.
- Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.
- Moisture control section.** The layer within a soil profile used to determine the soil moisture regime. The upper boundary is the depth to which a dry soil is moistened by 1 inch of water in 24 hours. The lower boundary is the depth to which a dry soil is moistened by 3 inches of water in 48 hours.
- Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil.** Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).
- Mountain.** A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.
- Mountain valleys.** Any small, externally drained depression floored with either till or alluvium, that occurs on a mountain or within mountains. (See intermontane basins.)
- Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- Mucky peat.** A USDA texture associated with organic soils that meet the degree of organic matter decomposition associated with hemic soil material.
- Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- Neutral soil.** A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)
- Nodules.** See Redoximorphic features.
- Nose slope** (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).
- Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.
- Ochric epipedon.** A surface horizon of mineral soil that is too light in color, too high in chroma, too low in organic carbon, or too thin to be a mollic, umbric, or histic epipedon.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low.....	1.0 to 2.0 percent
Moderate.....	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high.....	more than 8.0 percent

Outwash. Stratified and sorted sediment (mainly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

Outwash fan. An accumulation of outwash material deposited by meltwater streams in front of the end or recessional moraine of a glacier.

Outwash plain. An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Outwash terrace. A valley train deposit extending along a valley downstream from an outwash plain or terminal moraine; a flat-topped bank of outwash with an abrupt outer face.

Overland flow. Water that runs across the land after rainfall, either before it enters a watercourse or after it leaves a watercourse as floodwater or after it rises to the surface naturally from underground.

Overstory. The trees in a forest stand that form the upper crown cover. (See Understory.)

Oxidation. Any chemical reaction that removes electrons from a molecule or atom.

Paleosol. A soil that formed on a landscape in the past that has distinctive morphological features resulting from a soil-forming environment that no longer exists.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *duripan*, *placic horizon*, *plowpan*, and *traffic pan*.

Paralithic contact. A boundary between soil and coherent underlying material that can be dug with difficulty with a spade. It is referred to as weathered bedrock, has a cementation class of moderately cemented or weaker, and is typically referred to as a Cr horizon.

Pararock fragments. Fragments of rock that are 2 millimeters in diameter or more (e.g., paragravel, paracobble, or parastone). Pararock fragments have a moderately cemented to extremely weakly cemented rupture-resistance class.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment. A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

Pedogenesis. The processes of formation and development of soils.

Pedon. The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted

as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual” and in this glossary. Terms describing permeability, measured in inches per hour, are as follows:

Impermeable.....	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow.....	0.2 to 0.6 inch
Moderate.....	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid.....	more than 20 inches

See “Saturated hydraulic conductivity” for conversions of inches per hour to micrometers per second.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Plant association. A kind of climax plant community consisting of stands with essentially the same dominant species in corresponding layers.

Plant community. An assemblage of plants living together, reflecting no particular ecological status; a vegetative complex unique in its combination of plants.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

Pleistocene. The epoch of geologic time from approximately 10,000 to 2 million years ago. The earlier of the two epochs comprising the Quaternary period. Also called the Glacial epoch.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable

vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Puddling. Compaction of the soil surface during wet periods to the point that the soil particles are rearranged to a massive state.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid.....	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid.....	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid.....	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline.....	7.4 to 7.8
Moderately alkaline.....	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline.....	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
 - A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
 - B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
 - C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chroma less than that of the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
 - A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*

B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletalans).

3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Reduction. Any chemical reaction in which there is uptake of an electron by a molecule or atom.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Restrictive feature. A nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly reduce the movement of water and/or air through the soil or that otherwise provide an unfavorable root environment.

Riparian. Refers to areas adjacent to water or wetlands; vegetation is dependent on water or use and management directly impacts the water or wetlands.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments that are 2 millimeters in diameter or more (i.e., gravel, cobbles, stones, and boulders). Rock fragments have a strongly cemented or stronger rupture-resistance class.

Rock outcrop. Exposures of bare bedrock.

Rubble land. Areas that consist of cobbles, stones, and boulders, commonly at the base of mountains.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy. A particle-size class in which the texture of the fine-earth fraction is sand or loamy sand but not loamy very fine sand or very fine sand; it is less than 35 percent rock fragments by volume.

Sandy-skeletal. A particle-size class that is 35 percent or more, by volume, rock fragments 2 millimeters in diameter or larger. The fine-earth fraction is sandy.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (Ksat). The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as "Ksat." Terms describing saturated hydraulic conductivity are *very high*, 100 or more micrometers per second (14.17 or more inches per hour); *high*,

10 to 100 micrometers per second (1.417 to 14.17 inches per hour); *moderately high*, 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour); *moderately low*, 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour); *low*, 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour); and *very low*, less than 0.01 micrometer per second (less than 0.001417 inch per hour). To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Seral. Refers to the relative transitory aggregation of plants and animals within a sere; a preclimax stage of succession.

Seral species. A species associated with the early or middle stages of ecological succession.

Seral stand. A vegetative community composed of seral species.

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus,

Soil Survey of Benewah County Area, Idaho, Western Part

a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Level	0 to 1 percent
Nearly level	1 to 4 percent
Very gently sloping.....	4 to 8 percent
Gently sloping.....	8 to 12 percent
Moderately sloping.....	12 to 20 percent
Strongly sloping	20 to 40 percent
Moderately steep	40 to 50 percent
Steep	50 to 65 percent
Very steep.....	65 percent and higher

Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded gravel or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill (in tables). The slow filling of ponds, resulting from restricted water transmission in the soil.

Slow water movement (in tables). Restricted downward movement of water through the soil. (See Saturated hydraulic conductivity.)

Slump. A mass movement process characterized by a landslide involving shearing and rotary movement of a generally independent mass of rock or earth along a curved slip surface. The mass (slump) has its axis parallel to the slope from which it descends. A slump surface commonly exhibits a reversed slope facing uphill.

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand.....	0.10 to 0.05
Silt	0.05 to 0.002
Clay.....	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stand (forest stand). In ecology, a contiguous group of similar plants. In forestry, the tree species, proportion of species, and stand conditions present or desired.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stoniness (or boulderiness). The relative proportion of larger rock fragments on the surface layer. Used as map unit phase designation for soils containing sufficient amounts of stones and boulders to impose important restrictions on use and management. These phases should not be confused with the use of fragments as textural modifiers. The four phases recognized in this survey are:

Stony (or bouldery).—The areas have enough stones and boulders at or near the surface to be a continuing nuisance during operations that mix the surface layer, but they do not make most such operations impractical. Conventional, wheeled vehicles can move with reasonable freedom over the area. Rocks may damage both the equipment that mixes the soil and the vehicles that move on the surface. Large rock fragments cover about 0.01 to 0.1 percent of the surface.

Very stony (or very bouldery).—The areas have so many stones and boulders at or near the surface that operations that mix the surface layer either require heavy equipment or use of implements that can operate between the larger ones. Tillage with conventionally powered farm equipment is impractical. Wheeled tractors and vehicles with high clearance can operate on carefully chosen routes over and around stones and boulders. Large rock fragments cover about 0.1 to 3 percent of the surface.

Extremely stony (or extremely bouldery).—The areas have so many stones and boulders at or near the surface that wheeled powered equipment, other than some special types, can operate only along selected routes. Tracked vehicles can be used in most places, although some routes have to be cleared. Large rock fragments cover about 3 to 15 percent of the surface.

Rubbly and very rubbly.—The areas have so many stones and boulders at or near the surface that tracked vehicles cannot be used in most places. Large rock fragments cover about 15 to 90 percent of the surface.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel. Originally formed near the level of the stream. Represents the remnants of an abandoned flood plain, streambed, or valley floor produced during a former state of fluvial erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

- Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.
- Substratum.** The part of the soil below the solum.
- Subsurface layer.** Technically, the E horizon. Generally refers to a leached horizon that is lighter in color and lower in content of organic matter than the overlying surface layer.
- Succession.** The progressive replacement of plant communities on an ecological site leading to the climax plant community.
- Summer fallow.** The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.
- Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.
- Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."
- Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- Talus.** Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.
- Taxadjuncts.** Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.
- Terrace (conservation).** An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- Terrace.** (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.
- Terracettes.** Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.
- Tertiary.** The period of geologic time from approximately 2 to 63 million years ago (radiometric dates). The earlier of the two geologic periods comprising the Cenozoic era.
- Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam,*

silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Udic. A soil moisture regime common to a climate that has moisture throughout the year. The soil moisture control section is dry for less than 45 consecutive days during the 4 months following the summer solstice.

Understory. Plants in a forest community that grow to a height of 4.5 feet or less.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley fill. The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

Variation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Windthrow. The uprooting and tipping over of trees by the wind.

Xeric. A soil moisture regime common to a climate having moist winters and dry summers. The soils are dry in the moisture control section for more than 45 consecutive days during the 4 months following the summer solstice and are moist for more than 45 consecutive days during the 4 months following the winter solstice.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1971-2000 at Saint Maries, Idaho [8062])

Temperature										Precipitation
Month	2 years in 10 will have--				Average number of growing degree days*	2 years in 10 will have--		Less than--	Months	
	Average daily maximum	Average daily minimum	Average daily	Average	Maximum temperature higher than--	Minimum temperature lower than--	Average			
	°F	°F	°F	°F	°F	°F	Units	In	In	
January	34.6	23.4	29.0	51	-9		4	3.84	2.21	
February	41.3	26.2	33.8	60	-3		16	3.03	1.50	
March	49.8	30.3	40.1	71	12		73	2.61	1.64	
April	58.9	34.8	46.8	83	22		215	2.31	1.29	
May	67.1	40.9	54.0	90	28		432	2.39	1.68	
June	74.6	46.8	60.7	95	34		616	1.95	1.27	
July	83.3	50.3	66.8	100	38		827	1.27	0.37	
August	84.0	49.9	67.0	101	36		835	1.15	0.33	
September	73.6	42.4	58.0	95	27		540	1.21	0.30	
October	58.3	34.6	46.5	81	18		219	1.97	0.54	
November	41.2	29.7	35.5	60	7		32	4.07	2.36	
December	34.0	23.8	28.9	50	-5		4	4.14	2.14	
Yearly:										
Average	58.4	36.1	47.2	---	---	---	---	---	---	
Extreme	106.0	-24.0	---	102	-13		---	---	---	
Total	---	---	---	---	---	---	3,813	29.96	20.21	
									34	

Average number of days per year with at least 1 inch of snow on the ground: 50

*A growing degree day is a unit of heat available for plant growth. It can be calculated by subtracting the minimum and maximum daily temperatures, dividing the sum by 2, and subtracting the temperature threshold (usually 50 degrees F). For example, if the maximum temperature is 70 degrees F and the minimum is 30 degrees F, the growing degree day is (70 + 30) / 2 - 50 = 25 degrees F.

Soil Survey of Benewah County Area, Idaho, Western Part

Table 2.---Freeze Dates in Spring and Fall

(Recorded in the period 1971-2000 at Saint Maries, Idaho [8062])

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	April 18	May 14	May 30
2 years in 10 later than--	April 9	May 7	May 24
5 years in 10 later than--	March 25	April 24	May 13
First freezing temperature in fall:			
1 year in 10 earlier than--	October 3	September 20	September 7
2 years in 10 earlier than--	October 12	September 26	September 12
5 years in 10 earlier than--	October 30	October 10	September 22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 3.---Growing Season

(Recorded in the period 1971-2000 at Saint Maries, Idaho [8062])

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	<i>Days</i>	<i>Days</i>	<i>Days</i>
9 years in 10	176	138	103
8 years in 10	189	148	112
5 years in 10	215	167	130
2 years in 10	241	186	148
1 year in 10	255	196	157

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Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
105	Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes-----	43	*
116	Thatuna-Caldwell complex, 0 to 4 percent slopes-----	1,051	0.4
118	Thatuna-Cald complex, 0 to 8 percent slopes-----	1,403	0.6
120	Latahco silt loam, 0 to 2 percent slopes-----	2,106	0.9
121	Latahco-Lovell complex, 0 to 3 percent slopes-----	5,472	2.3
122	Tilma-Latah complex, 0 to 8 percent slopes-----	545	0.2
124	Caldwell-Cald complex, 0 to 3 percent slopes-----	2,241	0.9
125	Lovell-Porrett-Aquandic Endoaquepts complex, 0 to 3 percent slopes-----	1,338	0.6
130	Porrett ashy silt loam, 0 to 2 percent slopes-----	315	0.1
136	Lovell-Porrett complex, 0 to 2 percent slopes-----	2,954	1.2
141	Miesen ashy silt loam, 0 to 2 percent slopes-----	320	0.1
142	Miesen-Ramsdell complex, 0 to 2 percent slopes-----	183	*
143	Miesen ashy silt loam, protected, drained, 0 to 2 percent slopes-----	295	0.1
144	Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes-----	605	0.3
145	Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes-----	345	0.1
150	Pywell muck, protected, drained, 0 to 1 percent slopes-----	31	*
155	Ramsdell ashy silt loam, 0 to 2 percent slopes-----	411	0.2
156	Ramsdell ashy silt loam, protected, drained, 0 to 2 percent slopes-----	237	*
157	Ramsdell-DeVoignes complex, protected, drained, 0 to 2 percent slopes----	800	0.3
158	DeVoignes-Pywell complex, 0 to 1 percent slopes-----	368	0.2
200	Blinn ashy silt loam, 5 to 35 percent slopes, stony-----	645	0.3
201	Blinn ashy silt loam, 35 to 65 percent slopes, stony-----	1,055	0.4
202	Blinn-Bobbitt complex, 35 to 65 percent slopes, stony-----	877	0.4
210	Agatha ashy silt loam, 5 to 35 percent slopes, stony-----	305	0.1
212	Agatha gravelly ashy silt loam, 35 to 65 percent slopes, stony-----	733	0.3
230	Lacy, stony-Rock outcrop complex, 5 to 35 percent slopes-----	161	*
231	Lacy, very stony-Rock outcrop complex, 35 to 65 percent slopes-----	907	0.4
232	Lacy-Bobbitt complex, 5 to 35 percent slopes, stony-----	3,032	1.3
233	Lacy-Bobbitt complex, 35 to 65 percent slopes, very stony-----	1,466	0.6
250	Dorb cobbly ashy silt loam, warm, 35 to 70 percent slopes, stony-----	581	0.2
255	Shayhill ashy silt loam, 15 to 40 percent slopes, stony-----	410	0.2
256	Shayhill gravelly ashy silt loam, 35 to 65 percent slopes, stony-----	355	0.1
257	Shayhill gravelly ashy silt loam, dry, 15 to 40 percent slopes, stony----	711	0.3
260	Seddow ashy silt loam, 15 to 35 percent slopes-----	711	0.3
261	Sly-Shayhill complex, dry, 30 to 60 percent slopes-----	251	0.1
262	Seddow-Sly, dry complex, 30 to 55 percent slopes-----	250	0.1
300	Taney ashy silt loam, 3 to 8 percent slopes-----	7,074	3.0
301	Taney ashy silt loam, 8 to 20 percent slopes-----	4,781	2.0
303	Carlinton-Benewah complex, 8 to 20 percent slopes-----	2,361	1.0
304	Benewah-Santa complex, 8 to 20 percent slopes-----	1,824	0.8
310	Santa ashy silt loam, 3 to 8 percent slopes-----	3,970	1.7
311	Santa ashy silt loam, 8 to 20 percent slopes-----	2,585	1.1
314	Sharptop-Santa complex, 8 to 20 percent slopes-----	3,300	1.4
315	Setters silt loam, 3 to 20 percent slopes-----	182	*
316	Setters-Taney complex, 3 to 20 percent slopes-----	1,833	0.8
320	Reggear ashy silt loam, 3 to 20 percent slopes-----	1,956	0.8
321	Reggear ashy silt loam, moist, 3 to 20 percent slopes-----	3,453	1.4
322	Reggear, moist-Sly complex, 3 to 25 percent slopes-----	1,470	0.6
323	Bechtel-Reggear complex, 15 to 40 percent slopes-----	3,245	1.4
325	Reggear-Sharptop, basalt substratum complex, 3 to 12 percent slopes-----	1,495	0.6
326	Reggear-Seddow complex, 3 to 25 percent slopes-----	598	0.3
330	Carlinton-Carlinton, dry complex, 3 to 20 percent slopes-----	7,697	3.2
335	Carlinton ashy silt loam, dry, 8 to 25 percent slopes-----	3,308	1.4
336	Carlinton, dry-Taney complex, 3 to 8 percent slopes-----	3,691	1.5
340	Arson-Lotuspoint complex, 10 to 40 percent slopes-----	2,585	1.1
341	Sinkler-Arson complex, 10 to 40 percent slopes-----	4,200	1.8
342	Sinkler-Arson complex, dry, 10 to 40 percent slopes-----	1,735	0.7
350	Southwick ashy silt loam, 3 to 8 percent slopes-----	6,053	2.5
351	Southwick ashy silt loam, 8 to 20 percent slopes-----	1,510	0.6
353	Tensed-Pedee complex, 3 to 15 percent slopes-----	2,020	0.8

See footnote at end of table.

Soil Survey of Benewah County Area, Idaho, Western Part

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
354	Tensed-Pedee complex, 15 to 35 percent slopes-----	1,636	0.7
355	Southwick-Driscoll complex, 3 to 15 percent slopes-----	3,711	1.6
356	Southwick-Driscoll complex, 15 to 25 percent slopes-----	983	0.4
360	Larkin silt loam, 3 to 12 percent slopes-----	2,370	1.0
361	Larkin silt loam, 12 to 20 percent slopes-----	1,386	0.6
363	Larkin-Driscoll complex, 3 to 12 percent slopes-----	2,555	1.1
364	Larkin-Southwick complex, 3 to 12 percent slopes-----	4,493	1.9
367	Larkin-Driscoll complex, 12 to 25 percent slopes-----	580	0.2
400	Driscoll silt loam, 10 to 25 percent slopes-----	1,620	0.7
405	Thatuna-Naff complex, 8 to 25 percent slopes-----	1,726	0.7
406	Thatuna-Naff complex, 25 to 40 percent slopes-----	410	0.2
410	Palouse-Naff complex, 3 to 8 percent slopes-----	1,880	0.8
411	Palouse silt loam, 8 to 25 percent slopes-----	385	0.2
414	Naff-Thatuna complex, 3 to 8 percent slopes-----	1,357	0.6
415	Naff-Tilma complex, 3 to 20 percent slopes-----	1,411	0.6
416	Naff-Thatuna complex, 8 to 25 percent slopes-----	1,391	0.6
417	Naff-Palouse complex, 8 to 25 percent slopes-----	1,361	0.6
420	Garfield-Tilma complex, 5 to 20 percent slopes-----	285	0.1
421	Naff-Garfield complex, 5 to 25 percent slopes-----	520	0.2
500	Hobo-Threebear complex, 5 to 30 percent slopes-----	1,610	0.7
501	Hobo-Threebear complex, warm, 5 to 35 percent slopes-----	1,487	0.6
510	Honeyjones-Ahrs complex, 15 to 35 percent slopes-----	488	0.2
600	Ardenvoir-Huckle association, 15 to 35 percent slopes-----	1,032	0.4
601	Ardenvoir-McCrosket association, 15 to 35 percent slopes-----	405	0.2
605	Benewah-Rasser complex, 5 to 15 percent slopes-----	1,880	0.8
606	Benewah-Rasser complex, 15 to 35 percent slopes-----	2,877	1.2
610	Schumacher silt loam, 5 to 25 percent slopes-----	405	0.2
611	Schumacher-Tekoa complex, 25 to 45 percent slopes-----	305	0.1
612	Libertybutte-Tekoa complex, 5 to 30 percent slopes-----	95	*
613	Ardenvoir, dry-Lotuspoint complex, 5 to 30 percent slopes-----	581	0.2
614	Ardenvoir, dry-Lotuspoint complex, 30 to 65 percent slopes-----	1,825	0.8
617	Tekoa gravelly ashy silt loam, 15 to 40 percent slopes-----	26	*
621	Huckle ashy silt loam, 15 to 35 percent slopes-----	927	0.4
625	Huckle-Ardenvoir association, 15 to 35 percent slopes-----	675	0.3
650	Grangemont ashy silt loam, 5 to 25 percent slopes-----	553	0.2
651	Kingspeak-Shayhill, stony complex, 5 to 40 percent slopes-----	1,346	0.6
652	Kingspeak ashy silt loam, 3 to 25 percent slopes-----	371	0.2
653	Kingspeak ashy silt loam, cool, 5 to 30 percent slopes-----	292	0.1
655	Tigley gravelly ashy silt loam, moist, 15 to 35 percent slopes-----	395	0.2
656	Kingspeak ashy silt loam, dry, 5 to 30 percent slopes-----	391	0.2
660	Threebear medial silt loam, 3 to 25 percent slopes-----	1,139	0.5
662	Threebear medial silt loam, warm, 3 to 25 percent slopes-----	155	*
663	Threebear, warm-Porrett complex, 0 to 4 percent slopes-----	252	0.1
665	Grangemont ashy silt loam, warm, 5 to 25 percent slopes-----	2,551	1.1
670	Honeyjones ashy silt loam, warm, 15 to 35 percent slopes-----	268	0.1
671	Honeyjones ashy silt loam, 15 to 35 percent slopes-----	532	0.2
680	Ardenvoir-Huckle complex, 5 to 20 percent slopes-----	2,611	1.1
681	Huckle-Ahrs complex, 5 to 20 percent slopes-----	1,091	0.5
700	Ardenvoir-Huckle association, 35 to 65 percent slopes-----	2,950	1.2
701	Ardenvoir-McCrosket association, 35 to 65 percent slopes-----	766	0.3
703	Ardenvoir, dry-Ardenvoir complex, 35 to 65 percent slopes-----	5,829	2.4
704	Ardenvoir, dry-Ardenvoir complex, 15 to 35 percent slopes-----	1,610	0.7
705	Ardenvoir-Rasser complex, 35 to 65 percent slopes-----	2,437	1.0
706	Ardenvoir gravelly ashy silt loam, 35 to 65 percent slopes-----	2,252	0.9
707	Huckle, dry-Ardenvoir complex, 35 to 65 percent slopes-----	3,860	1.6
710	McCrosket-Ardenvoir association, 15 to 35 percent slopes-----	492	0.2
711	McCrosket-Ardenvoir association, 35 to 65 percent slopes-----	801	0.3
712	McCrosket-Tekoa association, 35 to 65 percent slopes-----	492	0.2
716	Ahrs gravelly ashy silt loam, 15 to 35 percent slopes-----	245	0.1
720	Huckle ashy silt loam, 35 to 65 percent slopes-----	5,090	2.1
721	Huckle-Ardenvoir association, 35 to 65 percent slopes-----	1,452	0.6

See footnote at end of table.

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Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
735	Lotuspoint stony ashy silt loam, 35 to 65 percent slopes, stony-----	1,050	0.4
736	Lotuspoint, stony-Rock outcrop complex, 35 to 75 percent slopes-----	451	0.2
756	Tigley gravelly ashy silt loam, 35 to 65 percent slopes-----	1,422	0.6
757	Hugus ashy silt loam, warm, 30 to 65 percent slopes-----	995	0.4
758	Tigley, moist-Hugus complex, 30 to 65 percent slopes-----	1,733	0.7
765	Saint Maries-Huckle complex, 35 to 70 percent slopes-----	730	0.3
770	Pinecreek gravelly ashy silt loam, 35 to 65 percent slopes-----	885	0.4
771	Honeyjones ashy silt loam, warm, 35 to 65 percent slopes-----	5,030	2.1
772	Honeyjones, warm-Ahrs complex, 35 to 65 percent slopes-----	6,324	2.7
773	Honeyjones ashy silt loam, dry, 35 to 65 percent slopes-----	1,781	0.7
774	Pinecreek ashy silt loam, moist, 35 to 65 percent slopes-----	1,933	0.8
775	Pinecreek gravelly ashy silt loam, moist, 35 to 65 percent slopes-----	430	0.2
776	Cassyhill very gravelly ashy silt loam, 35 to 65 percent slopes-----	485	0.2
777	Boulder creek ashy silt loam, warm, 35 to 65 percent slopes-----	460	0.2
778	Cassyhill-Lotuspoint complex, 5 to 30 percent slopes-----	981	0.4
779	Boulder creek ashy silt loam, 35 to 65 percent slopes-----	167	*
780	Ardenvoir-Huckle-Saint Maries, dry complex, 35 to 65 percent slopes-----	1,422	0.6
781	Ahrs, moist-Honeyjones, warm complex, 35 to 75 percent slopes-----	531	0.2
782	Ardenvoir, dry-Cassyhill complex, 35 to 65 percent slopes-----	1,060	0.4
784	Pinecreek, moist-Lotuspoint complex, 35 to 65 percent slopes-----	1,697	0.7
791	Latour gravelly medial silt loam, 35 to 75 percent slopes-----	208	*
800	Rock outcrop-----	32	*
801	Pits, gravel-----	140	*
802	Kingspeak-Urban land complex, 5 to 35 percent slopes-----	190	*
900	Water-----	4,905	2.1
901	Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes----	430	0.2
902	Ahrs gravelly ashy silt loam, 35 to 75 percent slopes-----	2,677	1.1
903	Ahrs-Pinecreek association, 35 to 75 percent slopes-----	1,142	0.5
907	Honeyjones ashy silt loam, 35 to 75 percent slopes-----	4,905	2.1
908	Honeyjones-Ahrs association, 35 to 75 percent slopes-----	527	0.2
913	Hobo ashy silt loam, 15 to 40 percent slopes-----	2,045	0.9
Ac1	Arson-Carlinton complex, 8 to 35 percent slopes-----	46	*
Ac2	Arson-Carlinton complex, dry, 8 to 35 percent slopes-----	41	*
An4	Arson-Minaloosa complex, 25 to 60 percent slopes-----	4	*
Rs2	Reggear-Stewah complex, 10 to 35 percent slopes-----	41	*
	Total-----	238,240	100.0

* Less than 0.1 percent.

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Table 5.--Small Grain Productivity Index

(The "Crop Productivity Index" is for nonirrigated small grain. Index values range from 0.00 to 1.00. The higher the index value, the higher the productivity.)

Map unit symbol and name	Component name	Crop productivity index
105--Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes	Aquic Udifluvents, protected	0.23
	Typic Fluvaquents, protected	0.18
116--Thatuna-Caldwell complex, 0 to 4 percent slopes	Thatuna	0.98
	Caldwell	0.70
118--Thatuna-Cald complex, 0 to 8 percent slopes	Thatuna	0.98
	Cald	0.69
120--Latahco silt loam, 0 to 2 percent slopes	Latahco	0.65
121--Latahco-Lovell complex, 0 to 3 percent slopes	Latahco	0.65
	Lovell	0.51
122--Tilma-Latah complex, 0 to 8 percent slopes	Tilma	0.93
	Latah	0.64
124--Caldwell-Cald complex, 0 to 3 percent slopes	Caldwell	0.67
	Cald	0.59
125--Lovell-Porrett-Aquandic Endoaquepts complex, 0 to 3 percent slopes	Lovell	0.37
	Porrett	0.31
	Aquandic	0.29
	Endoaquepts	
130--Porrett ashy silt loam, 0 to 2 percent slopes	Porrett	0.07
136--Lovell-Porrett complex, 0 to 2 percent slopes	Lovell	0.37
	Porrett	0.31
141--Miesen ashy silt loam, 0 to 2 percent slopes	Miesen	0.54
142--Miesen-Ramsdell complex, 0 to 2 percent slopes	Miesen	0.54
	Ramsdell	0.33
143--Miesen ashy silt loam, protected, drained, 0 to 2 percent slopes	Miesen, protected, drained	0.88
144--Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes	Miesen, protected, drained	0.88
	Ramsdell, protected, drained	0.57
145--Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes	Bellslake, protected, drained	0.61
150--Pywell muck, protected, drained, 0 to 1 percent slopes	Pywell, protected, drained	0.45
155--Ramsdell ashy silt loam, 0 to 2 percent slopes	Ramsdell	0.33
156--Ramsdell ashy silt loam, protected, drained, 0 to 2 percent slopes	Ramsdell, protected, drained	0.57

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
157--Ramsdell-DeVoignes complex, protected, drained, 0 to 2 percent slopes	Ramsdell, protected, drained	0.57
	DeVoignes, protected, drained	0.51
158--DeVoignes-Pywell complex, 0 to 1 percent slopes	DeVoignes	0.17
	Pywell	0.25
200--Blinn ashy silt loam, 5 to 35 percent slopes, stony	Blinn, stony surface	0.21
201--Blinn ashy silt loam, 35 to 65 percent slopes, stony	Blinn, stony surface	0.06
202--Blinn-Bobbitt complex, 35 to 65 percent slopes, stony	Blinn, stony surface	0.06
	Bobbitt, stony surface	0.02
210--Agatha ashy silt loam, 5 to 35 percent slopes, stony	Agatha, stony surface	0.26
212--Agatha gravelly ashy silt loam, 35 to 65 percent slopes, stony	Agatha, stony surface	0.07
230--Lacy, stony-Rock outcrop complex, 5 to 35 percent slopes	Lacy, stony surface	0.01
	Rock outcrop	---
231--Lacy, very stony-Rock outcrop complex, 35 to 65 percent slopes	Lacy, very stony surface	0.00
	Rock outcrop	---
232--Lacy-Bobbitt complex, 5 to 35 percent slopes, stony	Lacy, stony surface	0.01
	Bobbitt, stony surface	0.08
233--Lacy-Bobbitt complex, 35 to 65 percent slopes, very stony	Lacy, very stony surface	0.00
	Bobbitt, very stony surface	0.02
250--Dorb cobbly ashy silt loam, warm, 35 to 70 percent slopes, stony	Dorb, warm, stony surface	0.06
255--Shayhill ashy silt loam, 15 to 40 percent slopes, stony	Shayhill, stony surface	0.17
256--Shayhill gravelly ashy silt loam, 35 to 65 percent slopes, stony	Shayhill, stony surface	0.07
257--Shayhill gravelly ashy silt loam, dry, 15 to 40 percent slopes, stony	Shayhill, dry, stony surface	0.08
260--Seddow ashy silt loam, 15 to 35 percent slopes	Seddow	0.42
261--Sly-Shayhill complex, dry, 30 to 60 percent slopes	Sly, dry	0.15
	Shayhill, dry	0.09
262--Seddow-Sly, dry complex, 30 to 55 percent slopes	Seddow	0.13
	Sly, dry	0.17

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
300--Taney ashy silt loam, 3 to 8 percent slopes	Taney	0.58
301--Taney ashy silt loam, 8 to 20 percent slopes	Taney	0.55
303--Carlinton-Benewah complex, 8 to 20 percent slopes	Carlinton Benewah	0.48 0.58
304--Benewah-Santa complex, 8 to 20 percent slopes	Benewah Santa	0.56 0.50
310--Santa ashy silt loam, 3 to 8 percent slopes	Santa	0.59
311--Santa ashy silt loam, 8 to 20 percent slopes	Santa	0.56
314--Sharptop-Santa complex, 8 to 20 percent slopes	Sharptop Santa	0.45 0.44
315--Setters silt loam, 3 to 20 percent slopes	Setters	0.65
316--Setters-Taney complex, 3 to 20 percent slopes	Setters Taney	0.66 0.49
320--Reggear ashy silt loam, 3 to 20 percent slopes	Reggear	0.20
321--Reggear ashy silt loam, moist, 3 to 20 percent slopes	Reggear, moist	0.19
322--Reggear, moist-Sly complex, 3 to 25 percent slopes	Reggear, moist Sly	0.19 0.51
323--Bechtel-Reggear complex, 15 to 40 percent slopes	Bechtel Reggear	0.25 0.14
325--Reggear-Sharptop, basalt substratum complex, 3 to 12 percent slopes	Reggear Sharptop, basalt substratum	0.21 0.55
326--Reggear-Seddow complex, 3 to 25 percent slopes	Reggear Seddow	0.20 0.54
330--Carlinton-Carlinton, dry complex, 3 to 20 percent slopes	Carlinton Carlinton, dry	0.55 0.54
335--Carlinton ashy silt loam, dry, 8 to 25 percent slopes	Carlinton, dry	0.53
336--Carlinton, dry-Taney complex, 3 to 8 percent slopes	Carlinton, dry Taney	0.57 0.58
340--Arson-Lotuspoint complex, 10 to 40 percent slopes	Arson Lotuspoint	0.33 0.04
341--Sinkler-Arson complex, 10 to 40 percent slopes	Sinkler Arson	0.51 0.33
342--Sinkler-Arson complex, dry, 10 to 40 percent slopes	Sinkler, dry Arson, dry	0.56 0.37
350--Southwick ashy silt loam, 3 to 8 percent slopes	Southwick	0.94
351--Southwick ashy silt loam, 8 to 20 percent slopes	Southwick	0.90

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
353--Tensed-Pedee complex, 3 to 15 percent slopes	Tensed Pedee	0.74 0.60
354--Tensed-Pedee complex, 15 to 35 percent slopes	Tensed Pedee	0.57 0.45
355--Southwick-Driscoll complex, 3 to 15 percent slopes	Southwick Driscoll	0.92 0.81
356--Southwick-Driscoll complex, 15 to 25 percent slopes	Southwick Driscoll	0.83 0.70
360--Larkin silt loam, 3 to 12 percent slopes	Larkin	0.93
361--Larkin silt loam, 12 to 20 percent slopes	Larkin	0.87
363--Larkin-Driscoll complex, 3 to 12 percent slopes	Larkin Driscoll	0.94 0.80
364--Larkin-Southwick complex, 3 to 12 percent slopes	Larkin Southwick	0.93 0.94
367--Larkin-Driscoll complex, 12 to 25 percent slopes	Larkin Driscoll	0.76 0.70
400--Driscoll silt loam, 10 to 25 percent slopes	Driscoll	0.78
405--Thatuna-Naff complex, 8 to 25 percent slopes	Thatuna Naff	0.91 0.93
406--Thatuna-Naff complex, 25 to 40 percent slopes	Thatuna Naff	0.44 0.61
410--Palouse-Naff complex, 3 to 8 percent slopes	Palouse Naff	1.00 0.98
411--Palouse silt loam, 8 to 25 percent slopes	Palouse	0.95
414--Naff-Thatuna complex, 3 to 8 percent slopes	Naff Thatuna	0.98 0.98
415--Naff-Tilma complex, 3 to 20 percent slopes	Naff Tilma	0.95 0.90
416--Naff-Thatuna complex, 8 to 25 percent slopes	Naff Thatuna	0.93 0.91
417--Naff-Palouse complex, 8 to 25 percent slopes	Naff Palouse	0.93 0.92
420--Garfield-Tilma complex, 5 to 20 percent slopes	Garfield Tilma	0.81 0.93
421--Naff-Garfield complex, 5 to 25 percent slopes	Naff Garfield	0.95 0.76
500--Hobo-Threebear complex, 5 to 30 percent slopes	Hobo Threebear	0.57 0.54
501--Hobo-Threebear complex, warm, 5 to 35 percent slopes	Hobo, warm Threebear, warm	0.43 0.43

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
510--Honeyjones-Ahrs complex, 15 to 35 percent slopes	Honeyjones Ahrs	0.19 0.25
600--Ardenvoir-Huckle association, 15 to 35 percent slopes	Ardenvoir Huckle	0.21 0.34
601--Ardenvoir-McCrosket association, 15 to 35 percent slopes	Ardenvoir McCrosket	0.27 0.28
605--Benewah-Rasser complex, 5 to 15 percent slopes	Benewah Rasser	0.58 0.40
606--Benewah-Rasser complex, 15 to 35 percent slopes	Benewah Rasser	0.41 0.24
610--Schumacher silt loam, 5 to 25 percent slopes	Schumacher	0.61
611--Schumacher-Tekoa complex, 25 to 45 percent slopes	Schumacher Tekoa	0.35 0.09
612--Libertybutte-Tekoa complex, 5 to 30 percent slopes	Libertybutte Tekoa	0.04 0.14
613--Ardenvoir, dry-Lotuspoint complex, 5 to 30 percent slopes	Ardenvoir, dry Lotuspoint	0.32 0.07
614--Ardenvoir, dry-Lotuspoint complex, 30 to 65 percent slopes	Ardenvoir, dry Lotuspoint	0.09 0.02
617--Tekoa gravelly ashy silt loam, 15 to 40 percent slopes	Tekoa	0.15
621--Huckle ashy silt loam, 15 to 35 percent slopes	Huckle	0.20
625--Huckle-Ardenvoir association, 15 to 35 percent slopes	Huckle Ardenvoir	0.22 0.21
650--Grangemont ashy silt loam, 5 to 25 percent slopes	Grangemont	0.46
651--Kingspeak-Shayhill, stony complex, 5 to 40 percent slopes	Kingspeak Shayhill, stony surface	0.51 0.17
652--Kingspeak ashy silt loam, 3 to 25 percent slopes	Kingspeak	0.56
653--Kingspeak ashy silt loam, cool, 5 to 30 percent slopes	Kingspeak, cool	0.53
655--Tigley gravelly ashy silt loam, moist, 15 to 35 percent slopes	Tigley, moist	0.35
656--Kingspeak ashy silt loam, dry, 5 to 30 percent slopes	Kingspeak, dry	0.53
660--Threebear medial silt loam, 3 to 25 percent slopes	Threebear	0.39
662--Threebear medial silt loam, warm, 3 to 25 percent slopes	Threebear, warm	0.45

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
663--Threebear, warm-Porrett complex, 0 to 4 percent slopes	Threebear, warm Porrett	0.37 0.07
665--Grangemont ashy silt loam, warm, 5 to 25 percent slopes	Grangemont, warm	0.58
670--Honeyjones ashy silt loam, warm, 15 to 35 percent slopes	Honeyjones, warm	0.19
671--Honeyjones ashy silt loam, 15 to 35 percent slopes	Honeyjones	0.23
680--Ardenvoir-Huckle complex, 5 to 20 percent slopes	Ardenvoir Huckle	0.35 0.37
681--Huckle-Ahrs complex, 5 to 20 percent slopes	Huckle Ahrs	0.30 0.33
700--Ardenvoir-Huckle association, 35 to 65 percent slopes	Ardenvoir Huckle	0.09 0.08
701--Ardenvoir-McCrosket association, 35 to 65 percent slopes	Ardenvoir McCrosket	0.09 0.09
703--Ardenvoir, dry-Ardenvoir complex, 35 to 65 percent slopes	Ardenvoir, dry Ardenvoir	0.08 0.08
704--Ardenvoir, dry-Ardenvoir complex, 15 to 35 percent slopes	Ardenvoir, dry Ardenvoir	0.27 0.27
705--Ardenvoir-Rasser complex, 35 to 65 percent slopes	Ardenvoir Rasser	0.09 0.09
706--Ardenvoir gravelly ashy silt loam, 35 to 65 percent slopes	Ardenvoir	0.09
707--Huckle, dry-Ardenvoir complex, 35 to 65 percent slopes	Huckle, dry Ardenvoir	0.09 0.09
710--McCrosket-Ardenvoir association, 15 to 35 percent slopes	McCrosket Ardenvoir	0.29 0.27
711--McCrosket-Ardenvoir association, 35 to 65 percent slopes	McCrosket Ardenvoir	0.09 0.09
712--McCrosket-Tekoa association, 35 to 65 percent slopes	McCrosket Tekoa	0.11 0.05
716--Ahrs gravelly ashy silt loam, 15 to 35 percent slopes	Ahrs	0.25
720--Huckle ashy silt loam, 35 to 65 percent slopes	Huckle	0.08
721--Huckle-Ardenvoir association, 35 to 65 percent slopes	Huckle Ardenvoir	0.08 0.09
735--Lotuspoint stony ashy silt loam, 35 to 65 percent slopes, stony	Lotuspoint, stony surface	0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
736--Lotuspoint, stony-Rock outcrop complex, 35 to 75 percent slopes	Lotuspoint, stony surface Rock outcrop	0.01 ---
756--Tigley gravelly ashy silt loam, 35 to 65 percent slopes	Tigley	0.12
757--Hugus ashy silt loam, warm, 30 to 65 percent slopes	Hugus, warm	0.10
758--Tigley, moist-Hugus complex, 30 to 65 percent slopes	Tigley, moist Hugus	0.12 0.10
765--Saint Maries-Huckle complex, 35 to 70 percent slopes	Saint Maries Huckle	0.05 0.08
770--Pinecreek gravelly ashy silt loam, 35 to 65 percent slopes	Pinecreek	0.11
771--Honeyjones ashy silt loam, warm, 35 to 65 percent slopes	Honeyjones, warm	0.07
772--Honeyjones, warm-Ahrs complex, 35 to 65 percent slopes	Honeyjones, warm Ahrs	0.07 0.08
773--Honeyjones ashy silt loam, dry, 35 to 65 percent slopes	Honeyjones, dry	0.07
774--Pinecreek ashy silt loam, moist, 35 to 65 percent slopes	Pinecreek, moist	0.11
775--Pinecreek gravelly ashy silt loam, moist, 35 to 65 percent slopes	Pinecreek, moist	0.11
776--Cassyhill very gravelly ashy silt loam, 35 to 65 percent slopes	Cassyhill	0.00
777--Boulder creek ashy silt loam, warm, 35 to 65 percent slopes	Boulder creek, warm	0.06
778--Cassyhill-Lotuspoint complex, 5 to 30 percent slopes	Cassyhill Lotuspoint	0.00 0.07
779--Boulder creek ashy silt loam, 35 to 65 percent slopes	Boulder creek	0.01
780--Ardenvoir-Huckle-Saint Maries, dry complex, 35 to 65 percent slopes	Ardenvoir Huckle Saint Maries, dry	0.09 0.09 0.07
781--Ahrs, moist-Honeyjones, warm complex, 35 to 75 percent slopes	Ahrs, moist Honeyjones, warm	0.08 0.07
782--Ardenvoir, dry-Cassyhill complex, 35 to 65 percent slopes	Ardenvoir, dry Cassyhill	0.09 0.00
784--Pinecreek, moist-Lotuspoint complex, 35 to 65 percent slopes	Pinecreek, moist Lotuspoint	0.11 0.02
791--Latour gravelly medial silt loam, 35 to 75 percent slopes	Latour	0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 5.--Small Grain Productivity Index--Continued

Map unit symbol and name	Component name	Crop productivity index
800--Rock outcrop	Rock outcrop	---
801--Pits, gravel	Pits, gravel	---
802--Kingspeak-Urban land complex, 5 to 35 percent slopes	Kingspeak Urban land	0.51 ---
900--Water	Water	---
901--Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes	Aquandic Endoaquepts Aquic Udifluvents	0.33 0.24
902--Ahrs gravelly ashy silt loam, 35 to 75 percent slopes	Ahrs	0.08
903--Ahrs-Pinecreek association, 35 to 75 percent slopes	Ahrs Pinecreek	0.08 0.09
907--Honeyjones ashy silt loam, 35 to 75 percent slopes	Honeyjones	0.07
908--Honeyjones-Ahrs association, 35 to 75 percent slopes	Honeyjones Ahhs	0.07 0.08
913--Hobo ashy silt loam, 15 to 40 percent slopes	Hobo	0.30
Ac1--Arson-Carlinton complex, 8 to 35 percent slopes	Arson Carlinton	0.46 0.43
Ac2--Arson-Carlinton complex, dry, 8 to 35 percent slopes	Arson, dry Carlinton, dry	0.53 0.43
An4--Arson-Minaloosa complex, 25 to 60 percent slopes	Arson, dry Minaloosa, dry	0.14 0.10
Rs2--Reggear-Stewah complex, 10 to 35 percent slopes	Reggear, moist Stewah	0.23 0.31

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.---Nonirrigated Hay Productivity Indices

(Productivity index values range from 0.00 to 1.00.
The higher the index value, the higher the potential
productivity.)

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
105: Aquic Udifluvents, protected-----	0.00	0.14	0.29
Typic Fluvaquents, protected-----	0.00	0.21	0.44
116: Thatuna-----	0.98	0.99	0.00
Caldwell-----	0.00	0.84	1.00
118: Thatuna-----	0.98	0.99	0.00
Cald-----	0.00	0.80	1.00
120: Latahco-----	0.00	0.82	1.00
121: Latahco-----	0.00	0.82	1.00
Lovell-----	0.00	0.00	0.51
122: Tilma-----	0.00	0.97	0.00
Latah-----	0.00	0.80	1.00
124: Caldwell-----	0.00	0.84	1.00
Cald-----	0.00	0.25	1.00
125: Lovell-----	0.00	0.00	0.51
Porrett-----	0.00	0.00	0.59
Aquandic Endoaquepts-----	0.00	0.11	0.50
130: Porrett-----	0.00	0.00	0.59
136: Lovell-----	0.00	0.00	0.51
Porrett-----	0.00	0.00	0.59
141: Miesen-----	0.00	0.78	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
142:			
Miesen-----	0.00	0.78	1.00
Ramsdell-----	0.00	0.00	0.69
143:			
Miesen, protected, drained	0.76	0.78	0.00
144:			
Miesen, protected, drained	0.76	0.78	0.00
Ramsdell, protected, drained-----	0.00	0.52	0.00
145:			
Bellslake, protected, drained-----	0.00	0.54	0.00
150:			
Pywell, protected, drained	0.00	0.54	0.00
155:			
Ramsdell-----	0.00	0.00	0.69
156:			
Ramsdell, protected, drained-----	0.00	0.52	0.00
157:			
Ramsdell, protected, drained-----	0.00	0.52	0.00
DeVoignes, protected, drained-----	0.00	0.46	0.00
158:			
DeVoignes-----	0.00	0.00	0.21
Pywell-----	0.00	0.00	0.21
200:			
Blinn, stony surface-----	0.08	0.12	0.00
201:			
Blinn, stony surface-----	0.00	0.06	0.00
202:			
Blinn, stony surface-----	0.00	0.06	0.00
Bobbitt, stony surface----	0.00	0.00	0.00
210:			
Agatha, stony surface-----	0.31	0.44	0.00
212:			
Agatha, stony surface-----	0.00	0.00	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
230:			
Lacy, stony surface-----	0.00	0.00	0.00
Rock outcrop-----	---	---	---
231:			
Lacy, very stony surface--	0.00	0.00	0.00
Rock outcrop-----	---	---	---
232:			
Lacy, stony surface-----	0.00	0.00	0.00
Bobbitt, stony surface----	0.00	0.00	0.00
233:			
Lacy, very stony surface--	0.00	0.00	0.00
Bobbitt, very stony surface-----	0.00	0.00	0.00
250:			
Dorb, warm, stony surface	0.00	0.00	0.00
255:			
Shayhill, stony surface---	0.00	0.00	0.00
256:			
Shayhill, stony surface---	0.00	0.00	0.00
257:			
Shayhill, dry, stony surface-----	0.00	0.00	0.00
260:			
Seddow-----	0.34	0.61	0.00
261:			
Sly, dry-----	0.00	0.33	0.00
Shayhill, dry-----	0.00	0.00	0.00
262:			
Seddow-----	0.00	0.38	0.00
Sly, dry-----	0.00	0.34	0.00
300:			
Taney-----	0.00	0.81	0.00
301:			
Taney-----	0.00	0.81	0.00
303:			
Carlinton-----	0.00	0.75	0.00
Benewah-----	0.00	0.49	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
304: Benewah-----	0.00	0.49	0.00
Santa-----	0.00	0.63	0.00
310: Santa-----	0.00	0.67	0.00
311: Santa-----	0.00	0.67	0.00
314: Sharptop-----	0.41	0.45	0.00
Santa-----	0.00	0.56	0.00
315: Setters-----	0.00	0.87	0.00
316: Setters-----	0.00	0.84	0.00
Taney-----	0.00	0.81	0.00
320: Reggear-----	0.00	0.42	0.00
321: Reggear, moist-----	0.00	0.37	0.00
322: Reggear, moist-----	0.00	0.37	0.00
Sly-----	0.40	0.51	0.00
323: Bechtel-----	0.11	0.29	0.00
Reggear-----	0.00	0.40	0.00
325: Reggear-----	0.00	0.42	0.00
Sharptop, basalt substratum-----	0.43	0.51	0.00
326: Reggear-----	0.00	0.42	0.00
Seddow-----	0.47	0.62	0.00
330: Carlinton-----	0.00	0.77	0.00
Carlinton, dry-----	0.00	0.77	0.00
335: Carlinton, dry-----	0.00	0.77	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
336:			
Carlinton, dry-----	0.00	0.77	0.00
Taney-----	0.00	0.81	0.00
340:			
Arson-----	0.17	0.46	0.00
Lotuspoint-----	0.00	0.00	0.00
341:			
Sinkler-----	0.39	0.59	0.00
Arson-----	0.19	0.49	0.00
342:			
Sinkler, dry-----	0.41	0.62	0.00
Arson, dry-----	0.20	0.53	0.00
350:			
Southwick-----	0.87	0.95	0.00
351:			
Southwick-----	0.83	0.94	0.00
353:			
Tensed-----	0.00	0.76	0.00
Pedee-----	0.00	0.67	0.00
354:			
Tensed-----	0.00	0.76	0.00
Pedee-----	0.00	0.67	0.00
355:			
Southwick-----	0.87	0.95	0.00
Driscoll-----	0.00	0.88	0.00
356:			
Southwick-----	0.71	0.95	0.00
Driscoll-----	0.00	0.88	0.00
360:			
Larkin-----	0.83	0.94	0.00
361:			
Larkin-----	0.73	0.94	0.00
363:			
Larkin-----	0.83	0.94	0.00
Driscoll-----	0.00	0.89	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
364:			
Larkin-----	0.83	0.94	0.00
Southwick-----	0.88	0.95	0.00
367:			
Larkin-----	0.62	0.92	0.00
Driscoll-----	0.00	0.88	0.00
400:			
Driscoll-----	0.00	0.88	0.00
405:			
Thatuna-----	0.88	0.98	0.00
Naff-----	0.90	0.96	0.00
406:			
Thatuna-----	0.21	0.73	0.00
Naff-----	0.41	0.79	0.00
410:			
Palouse-----	0.56	1.00	0.00
Naff-----	0.95	0.96	0.00
411:			
Palouse-----	0.54	1.00	0.00
414:			
Naff-----	0.95	0.96	0.00
Thatuna-----	0.98	0.99	0.00
415:			
Naff-----	0.95	0.96	0.00
Tilma-----	0.00	0.97	0.00
416:			
Naff-----	0.90	0.96	0.00
Thatuna-----	0.88	0.98	0.00
417:			
Naff-----	0.90	0.96	0.00
Palouse-----	0.49	1.00	0.00
420:			
Garfield-----	0.62	0.69	0.00
Tilma-----	0.00	0.97	0.00
421:			
Naff-----	0.95	0.96	0.00
Garfield-----	0.59	0.69	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
500:			
Hobo-----	0.00	0.64	0.00
Threebear-----	0.00	0.65	0.00
501:			
Hobo, warm-----	0.00	0.56	0.00
Threebear, warm-----	0.00	0.65	0.00
510:			
Honeyjones-----	0.14	0.25	0.00
Ahrs-----	0.16	0.25	0.00
600:			
Ardenvoir-----	0.12	0.33	0.00
Huckle-----	0.22	0.30	0.00
601:			
Ardenvoir-----	0.23	0.39	0.00
McCrosket-----	0.15	0.28	0.00
605:			
Benewah-----	0.00	0.46	0.00
Rasser-----	0.00	0.00	0.00
606:			
Benewah-----	0.00	0.40	0.00
Rasser-----	0.00	0.00	0.00
610:			
Schumacher-----	0.63	0.78	0.00
611:			
Schumacher-----	0.20	0.57	0.00
Tekoa-----	0.00	0.00	0.00
612:			
Libertybutte-----	0.00	0.00	0.00
Tekoa-----	0.00	0.00	0.00
613:			
Ardenvoir, dry-----	0.00	0.00	0.00
Lotuspoint-----	0.00	0.00	0.00
614:			
Ardenvoir, dry-----	0.00	0.00	0.00
Lotuspoint-----	0.00	0.00	0.00
617:			
Tekoa-----	0.00	0.00	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
621: Huckle-----	0.13	0.28	0.00
625: Huckle-----	0.14	0.28	0.00
Ardenvoir-----	0.14	0.37	0.00
650: Grangemont-----	0.52	0.59	0.00
651: Kingspeak-----	0.41	0.52	0.00
Shayhill, stony surface---	0.00	0.00	0.00
652: Kingspeak-----	0.47	0.52	0.00
653: Kingspeak, cool-----	0.43	0.52	0.00
655: Tigley, moist-----	0.13	0.24	0.00
656: Kingspeak, dry-----	0.43	0.52	0.00
660: Threebear-----	0.00	0.67	0.00
662: Threebear, warm-----	0.00	0.66	0.00
663: Threebear, warm-----	0.00	0.79	0.00
Porrett-----	0.00	0.00	0.59
665: Grangemont, warm-----	0.52	0.59	0.00
670: Honeyjones, warm-----	0.10	0.18	0.00
671: Honeyjones-----	0.13	0.24	0.00
680: Ardenvoir-----	0.20	0.25	0.00
Huckle-----	0.14	0.17	0.00
681: Huckle-----	0.16	0.20	0.00
Ahrs-----	0.19	0.23	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
700:			
Ardenvoir-----	0.00	0.00	0.00
Huckle-----	0.00	0.14	0.00
701:			
Ardenvoir-----	0.00	0.00	0.00
McCrosket-----	0.00	0.00	0.00
703:			
Ardenvoir, dry-----	0.00	0.00	0.00
Ardenvoir-----	0.00	0.00	0.00
704:			
Ardenvoir, dry-----	0.00	0.00	0.00
Ardenvoir-----	0.24	0.40	0.00
705:			
Ardenvoir-----	0.00	0.00	0.00
Rasser-----	0.00	0.00	0.00
706:			
Ardenvoir-----	0.00	0.00	0.00
707:			
Huckle, dry-----	0.00	0.15	0.00
Ardenvoir-----	0.00	0.00	0.00
710:			
McCrosket-----	0.19	0.33	0.00
Ardenvoir-----	0.27	0.46	0.00
711:			
McCrosket-----	0.00	0.00	0.00
Ardenvoir-----	0.00	0.00	0.00
712:			
McCrosket-----	0.00	0.16	0.00
Tekoa-----	0.00	0.00	0.00
716:			
Ahrs-----	0.14	0.22	0.00
720:			
Huckle-----	0.00	0.08	0.00
721:			
Huckle-----	0.00	0.13	0.00
Ardenvoir-----	0.00	0.00	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
735: Lotuspoint, stony surface	0.00	0.00	0.00
736: Lotuspoint, stony surface	0.00	0.00	0.00
Rock outcrop-----	---	---	---
756: Tigley-----	0.00	0.12	0.00
757: Hugus, warm-----	0.00	0.32	0.00
758: Tigley, moist-----	0.00	0.14	0.00
Hugus-----	0.00	0.30	0.00
765: Saint Maries-----	0.00	0.00	0.00
Huckle-----	0.00	0.18	0.00
770: Pinecreek-----	0.00	0.00	0.00
771: Honeyjones, warm-----	0.00	0.00	0.00
772: Honeyjones, warm-----	0.00	0.00	0.00
Ahrs-----	0.00	0.00	0.00
773: Honeyjones, dry-----	0.00	0.00	0.00
774: Pinecreek, moist-----	0.00	0.00	0.00
775: Pinecreek, moist-----	0.00	0.00	0.00
776: Cassyhill-----	0.00	0.00	0.00
777: Boulder creek, warm-----	0.00	0.00	0.00
778: Cassyhill-----	0.00	0.00	0.00
Lotuspoint-----	0.00	0.00	0.00
779: Boulder creek-----	0.00	0.00	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
780:			
Ardenvoir-----	0.00	0.00	0.00
Huckle-----	0.00	0.14	0.00
Saint Maries, dry-----	0.00	0.00	0.00
781:			
Ahrs, moist-----	0.00	0.00	0.00
Honeyjones, warm-----	0.00	0.00	0.00
782:			
Ardenvoir, dry-----	0.00	0.00	0.00
Cassyhill-----	0.00	0.00	0.00
784:			
Pinecreek, moist-----	0.00	0.00	0.00
Lotuspoint-----	0.00	0.00	0.00
791:			
Latour-----	0.00	0.00	0.00
800:			
Rock outcrop-----	---	---	---
801:			
Pits, gravel-----	---	---	---
802:			
Kingspeak-----	0.41	0.52	0.00
Urban land-----	---	---	---
900:			
Water-----	---	---	---
901:			
Aquandic Endoaquepts-----	0.00	0.10	0.50
Aquic Udifluvents-----	0.00	0.19	0.29
902:			
Ahrs-----	0.00	0.00	0.00
903:			
Ahrs-----	0.00	0.00	0.00
Pinecreek-----	0.00	0.00	0.00
907:			
Honeyjones-----	0.00	0.00	0.00
908:			
Honeyjones-----	0.00	0.00	0.00
Ahrs-----	0.00	0.00	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 6.--Nonirrigated Hay Productivity Indices--Continued

Map unit symbol and soil name	Hay productivity indices		
	Alfalfa hay	Grass hay	Wild hay*
913: Hobo-----	0.00	0.48	0.00
Ac1: Arson-----	0.20	0.37	0.00
Carlinton-----	0.00	0.79	0.00
Ac2: Arson, dry-----	0.29	0.44	0.00
Carlinton, dry-----	0.00	0.86	0.00
An4: Arson, dry-----	0.00	0.18	0.00
Minaloosa, dry-----	0.00	0.16	0.00
Rs2: Reggear, moist-----	0.00	0.68	0.00
Stewah-----	0.40	0.62	0.00

*Wild hay is produced on sites that are subirrigated with a naturally occurring high water table in the root zone that persists for a considerable part of the growing season. Vegetation consists of water-tolerant grasses, rushes, and sedges that occur naturally or have colonized in areas where the woody vegetation has been removed.

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification

Map symbol and soil name	Land capability subclass (nonirrigated)
105:	
Aquic Udifluvents, protected-----	3w
Typic Fluvaquents, protected-----	5w
116:	
Thatuna-----	3w
Caldwell-----	4w
118:	
Thatuna-----	3w
Cald-----	5w
120:	
Latahco-----	3w
121:	
Latahco-----	3w
Lovell-----	5w
122:	
Tilma-----	3w
Latah-----	4w
124:	
Caldwell-----	4w
Cald-----	5w
125:	
Lovell-----	5w
Porrett-----	5w
Aquandic Endoaquepts-----	5w
130:	
Porrett-----	5w
136:	
Lovell-----	5w
Porrett-----	5w
141:	
Miesen-----	3w
142:	
Miesen-----	3w
Ramsdell-----	5w
143:	
Miesen, protected, drained-----	3w

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
144:	
Miesen, protected, drained-----	3w
Ramsdell, protected, drained-----	5w
145:	
Bellslake, protected, drained-----	5w
150:	
Pywell, protected, drained-----	5w
155:	
Ramsdell-----	5w
156:	
Ramsdell, protected, drained-----	5w
157:	
Ramsdell, protected, drained-----	5w
DeVoignes, protected, drained-----	5w
158:	
DeVoignes-----	5w
Pywell-----	5w
200:	
Blinn, stony surface-----	4e
201:	
Blinn, stony surface-----	7e
202:	
Blinn, stony surface-----	7e
Bobbitt, stony surface-----	7e
210:	
Agatha, stony surface-----	4e
212:	
Agatha, stony surface-----	7e
230:	
Lacy, stony surface-----	6e
Rock outcrop-----	8
231:	
Lacy, very stony surface-----	7e
Rock outcrop-----	8
232:	
Lacy, stony surface-----	6e
Bobbitt, stony surface-----	4e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
233:	
Lacy, very stony surface-----	7e
Bobbitt, very stony surface-----	7e
250:	
Dorb, warm, stony surface-----	8e
255:	
Shayhill, stony surface-----	6e
256:	
Shayhill, stony surface-----	7e
257:	
Shayhill, dry, stony surface-----	7e
260:	
Seddow-----	6e
261:	
Sly, dry-----	7e
Shayhill, dry-----	7e
262:	
Seddow-----	7e
Sly, dry-----	7e
300:	
Taney-----	3s
301:	
Taney-----	4e
303:	
Carlinton-----	4e
Benewah-----	4e
304:	
Benewah-----	4e
Santa-----	4e
310:	
Santa-----	4s
311:	
Santa-----	4e
314:	
Sharptop-----	4e
Santa-----	4e
315:	
Setters-----	3e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
316:	
Setters-----	3e
Taney-----	4s
320:	
Reggear-----	4s
321:	
Reggear, moist-----	4s
322:	
Reggear, moist-----	4s
Sly-----	6e
323:	
Bechtel-----	6e
Reggear-----	4e
325:	
Reggear-----	4s
Sharptop, basalt substratum-----	3e
326:	
Reggear-----	4s
Seddow-----	4e
330:	
Carlinton-----	4e
Carlinton, dry-----	4e
335:	
Carlinton, dry-----	4e
336:	
Carlinton, dry-----	3s
Taney-----	3s
340:	
Arson-----	6e
Lotuspoint-----	7e
341:	
Sinkler-----	6e
Arson-----	6e
342:	
Sinkler, dry-----	6e
Arson, dry-----	6e
350:	
Southwick-----	3w

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
351: Southwick-----	3e
353: Tensed-----	3e
Pedee-----	3e
354: Tensed-----	4e
Pedee-----	4e
355: Southwick-----	3e
Driscoll-----	3e
356: Southwick-----	4e
Driscoll-----	4e
360: Larkin-----	3s
361: Larkin-----	4e
363: Larkin-----	3e
Driscoll-----	3e
364: Larkin-----	3e
Southwick-----	3e
367: Larkin-----	4e
Driscoll-----	4e
400: Driscoll-----	3e
405: Thatuna-----	3e
Naff-----	3e
406: Thatuna-----	6e
Naff-----	6e
410: Palouse-----	2e
Naff-----	2e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
411: Palouse-----	3e
414: Naff-----	2e
Thatuna-----	3w
415: Naff-----	3e
Tilma-----	3e
416: Naff-----	3e
Thatuna-----	3e
417: Naff-----	3e
Palouse-----	4e
420: Garfield-----	4e
Tilma-----	3w
421: Naff-----	3e
Garfield-----	4e
500: Hobo-----	4e
Threebear-----	4s
501: Hobo, warm-----	6e
Threebear, warm-----	4s
510: Honeyjones-----	6e
Ahrs-----	6e
600: Ardenvoir-----	6e
Huckle-----	4e
601: Ardenvoir-----	6e
McCrosket-----	6e
605: Benewah-----	4e
Rasser-----	3e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
606:	
Benewah-----	6e
Rasser-----	6e
610:	
Schumacher-----	3e
611:	
Schumacher-----	6e
Tekoa-----	6e
612:	
Libertybutte-----	6e
Tekoa-----	6e
613:	
Ardenvoir, dry-----	4e
Lotuspoint-----	4e
614:	
Ardenvoir, dry-----	7e
Lotuspoint-----	7e
617:	
Tekoa-----	6e
621:	
Huckle-----	6e
625:	
Huckle-----	6e
Ardenvoir-----	6e
650:	
Grangemont-----	4e
651:	
Kingspeak-----	4e
Shayhill, stony surface-----	6e
652:	
Kingspeak-----	4e
653:	
Kingspeak, cool-----	4e
655:	
Tigley, moist-----	6e
656:	
Kingspeak, dry-----	4e
660:	
Threebear-----	4s

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
662: Threebear, warm-----	4s
663: Threebear, warm-----	4s
Porrett-----	5w
665: Grangemont, warm-----	4e
670: Honeyjones, warm-----	6e
671: Honeyjones-----	6e
680: Ardenvoir-----	4e
Huckle-----	4e
681: Huckle-----	4e
Ahrs-----	4e
700: Ardenvoir-----	7e
Huckle-----	7e
701: Ardenvoir-----	7e
McCrosket-----	7e
703: Ardenvoir, dry-----	7e
Ardenvoir-----	7e
704: Ardenvoir, dry-----	6e
Ardenvoir-----	6e
705: Ardenvoir-----	7e
Rasser-----	7e
706: Ardenvoir-----	7e
707: Huckle, dry-----	7e
Ardenvoir-----	7e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
710: McCrosket-----	4e
Ardenvoir-----	6e
711: McCrosket-----	7e
Ardenvoir-----	7e
712: McCrosket-----	7e
Tekoa-----	7e
716: Ahrs-----	6e
720: Huckle-----	7e
721: Huckle-----	7e
Ardenvoir-----	7e
735: Lotuspoint, stony surface-----	7e
736: Lotuspoint, stony surface-----	7e
Rock outcrop-----	8
756: Tigley-----	7e
757: Hugus, warm-----	7e
758: Tigley, moist-----	7e
Hugus-----	7e
765: Saint Maries-----	8e
Huckle-----	7e
770: Pinecreek-----	7e
771: Honeyjones, warm-----	7e
772: Honeyjones, warm-----	7e
Ahrs-----	7e

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
773: Honeyjones, dry-----	7e
774: Pinecreek, moist-----	7e
775: Pinecreek, moist-----	7e
776: Cassyhill-----	7e
777: Boulder creek, warm-----	7e
778: Cassyhill-----	6s
Lotuspoint-----	4e
779: Boulder creek-----	7e
780: Ardenvoir-----	7e
Huckle-----	7e
Saint Maries, dry-----	7e
781: Ahrs, moist-----	8e
Honeyjones, warm-----	7e
782: Ardenvoir, dry-----	7e
Cassyhill-----	7e
784: Pinecreek, moist-----	7e
Lotuspoint-----	7e
791: Latour-----	7e
800: Rock outcrop-----	8
801: Pits, gravel-----	8
802: Kingspeak-----	4e
Urban land-----	8
900: Water-----	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 7.--Land Capability Classification--Continued

Map symbol and soil name	Land capability subclass (nonirrigated)
901:	
Aquandic Endoaquepts-----	5w
Aquic Udifluvents-----	3w
902:	
Ahrs-----	7e
903:	
Ahrs-----	7e
Pinecreek-----	7e
907:	
Honeyjones-----	7e
908:	
Honeyjones-----	7e
Ahrs-----	7e
913:	
Hobo-----	6e
Ac1:	
Arson-----	6e
Carlinton-----	6e
Ac2:	
Arson, dry-----	6e
Carlinton, dry-----	6e
An4:	
Arson, dry-----	7e
Minaloosa, dry-----	7e
Rs2:	
Reggear, moist-----	6e
Stewah-----	6e

Table 8.--Prime and other Important Farmland

(Only the soils considered prime or important farmland are listed. Urban or built-up areas listed are not considered prime or important farmland. If a soil is prime or important under certain conditions, the conditions are specified in parentheses after the soil.)

Map symbol	Map unit name	Farmland
141	Miesen ashy silt loam, 0 to 2 percent slopes-----	All areas are prime
143	Miesen ashy silt loam, protected, drained, 0 to 2 percent slopes-----	All areas are prime
410	Palouse-Naff complex, 3 to 8 percent slopes-----	All areas are prime
360	Larkin silt loam, 3 to 12 percent slopes-----	All areas are prime
417	Naff-Palouse complex, 8 to 25 percent slopes-----	Farmland of state
601	Ardenvoir-McCrosket association, 15 to 35 percent slopes-----	Farmland of state
610	Schumacher silt loam, 5 to 25 percent slopes-----	Farmland of state
612	Libertybutte-Tekoa complex, 5 to 30 percent slopes-----	Farmland of state
613	Ardenvoir, dry-Lotuspoint complex, 5 to 30 percent slopes-----	Farmland of state
617	Tekoa gravelly ashy silt loam, 15 to 40 percent slopes-----	Farmland of state
650	Grangemont ashy silt loam, 5 to 25 percent slopes-----	Farmland of state
652	Kingspeak ashy silt loam, 3 to 25 percent slopes-----	Farmland of state
665	Grangemont ashy silt loam, warm, 5 to 25 percent slopes-----	Farmland of state
680	Ardenvoir-Huckle complex, 5 to 20 percent slopes-----	Farmland of state
681	Huckle-Ahrs complex, 5 to 20 percent slopes-----	Farmland of state
704	Ardenvoir, dry-Ardenvoir complex, 15 to 35 percent slopes-----	Farmland of state
716	Ahrs gravelly ashy silt loam, 15 to 35 percent slopes-----	Farmland of state
301	Taney ashy silt loam, 8 to 20 percent slopes-----	Farmland of state if drained
303	Carlinton-Benewah complex, 8 to 20 percent slopes-----	Farmland of state if drained
310	Santa ashy silt loam, 3 to 8 percent slopes-----	Farmland of state if drained
311	Santa ashy silt loam, 8 to 20 percent slopes-----	Farmland of state if drained
314	Sharptop-Santa complex, 8 to 20 percent slopes-----	Farmland of state if drained
315	Setters silt loam, 3 to 20 percent slopes-----	Farmland of state if drained
316	Setters-Taney complex, 3 to 20 percent slopes-----	Farmland of state if drained
320	Reggear ashy silt loam, 3 to 20 percent slopes-----	Farmland of state if drained
321	Reggear ashy silt loam, moist, 3 to 20 percent slopes-----	Farmland of state if drained
325	Reggear-Sharptop, basalt substratum complex, 3 to 12 percent slopes-----	Farmland of state if drained
326	Reggear-Sedgwick complex, 3 to 25 percent slopes-----	Farmland of state if drained

Table 8.--Prime and other Important Farmland--Continued

Map symbol	Map unit name	Farmland
330	Carlinton-Carlinton, dry complex, 3 to 20 percent slopes----	Farmland of state if drained
335	Carlinton ashy silt loam, dry, 8 to 25 percent slopes-----	Farmland of state if drained
351	Southwick ashy silt loam, 8 to 20 percent slopes-----	Farmland of state if drained
353	Tensed-Pedee complex, 3 to 15 percent slopes-----	Farmland of state if drained
355	Southwick-Driscoll complex, 3 to 15 percent slopes-----	Farmland of state if drained
363	Larkin-Driscoll complex, 3 to 12 percent slopes-----	Farmland of state if drained
364	Larkin-Southwick complex, 3 to 12 percent slopes-----	Farmland of state if drained
400	Driscoll silt loam, 10 to 25 percent slopes-----	Farmland of state if drained
405	Thatuna-Naff complex, 8 to 25 percent slopes-----	Farmland of state if drained
415	Naff-Tilma complex, 3 to 20 percent slopes-----	Farmland of state if drained
416	Naff-Thatuna complex, 8 to 25 percent slopes-----	Farmland of state if drained
420	Garfield-Tilma complex, 5 to 20 percent slopes-----	Farmland of state if drained
605	Benewah-Rasser complex, 5 to 15 percent slopes-----	Farmland of state if drained
660	Threebear medial silt loam, 3 to 25 percent slopes-----	Farmland of state if drained
662	Threebear medial silt loam, warm, 3 to 25 percent slopes----	Farmland of state if drained
105	Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes	Prime farmland, i
116	Thatuna-Caldwell complex, 0 to 4 percent slopes-----	Prime farmland, i
120	Latahco silt loam, 0 to 2 percent slopes-----	Prime farmland, i
121	Latahco-Lovell complex, 0 to 3 percent slopes-----	Prime farmland, i
122	Tilma-Latah complex, 0 to 8 percent slopes-----	Prime farmland, i
144	Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes-----	Prime farmland, i
145	Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes-----	Prime farmland, i
150	Pywell muck, protected, drained, 0 to 1 percent slopes-----	Prime farmland, i
156	Ramsdell ashy silt loam, protected, drained, 0 to 2 percent slopes-----	Prime farmland, i
157	Ramsdell-DeVoignes complex, protected, drained, 0 to 2 percent slopes-----	Prime farmland, i
300	Taney ashy silt loam, 3 to 8 percent slopes-----	Prime farmland, i
336	Carlinton, dry-Taney complex, 3 to 8 percent slopes-----	Prime farmland, i

Table 8.--Prime and other Important Farmland--Continued

Map symbol	Map unit name	Farmland
350	Southwick ashy silt loam, 3 to 8 percent slopes-----	Prime farmland, i
414	Naff-Thatuna complex, 3 to 8 percent slopes-----	Prime farmland, i
118	Thatuna-Cald complex, 0 to 8 percent slopes-----	Prime farmland, i protected from f frequently flood season
124	Caldwell-Cald complex, 0 to 3 percent slopes-----	Prime farmland, i protected from f frequently flood season
125	Lovell-Porrett-Aquandic Endoaquepts complex, 0 to 3 percent slopes-----	Prime farmland, i protected from f frequently flood season
130	Porrett ashy silt loam, 0 to 2 percent slopes-----	Prime farmland, i protected from f frequently flood season
136	Lovell-Porrett complex, 0 to 2 percent slopes-----	Prime farmland, i protected from f frequently flood season
142	Miesen-Ramsdell complex, 0 to 2 percent slopes-----	Prime farmland, i protected from f frequently flood season
155	Ramsdell ashy silt loam, 0 to 2 percent slopes-----	Prime farmland, i protected from f frequently flood season
158	DeVoignes-Pywell complex, 0 to 1 percent slopes-----	Prime farmland, i protected from f frequently flood season
663	Threebear, warm-Porrett complex, 0 to 4 percent slopes-----	Prime farmland, i protected from f frequently flood season
901	Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes-----	Prime farmland, i protected from f frequently flood season

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Filtering capacity Strongly contrasting textural stratification Depth to saturated zone Flooding Droughty	1.00 0.97 0.86 0.60 0.11	Very limited Filtering capacity Flooding Strongly contrasting stratification Depth to saturated zone Depth to saturated zone Too acid	1.00 1.00 0.97 0.86 0.86 0.21
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Leaching Strongly contrasting textural stratification Flooding Droughty	1.00 0.90 0.71 0.60 0.09	Very limited Depth to saturated zone Flooding Strongly contrasting textural stratification Droughty Too acid	1.00 1.00 0.71 0.09 0.03
116: Thatuna-----	45	Somewhat limited Depth to saturated zone	0.93	Somewhat limited Depth to saturated zone	0.93
Caldwell-----	35	Very limited Depth to saturated zone Leaching Flooding Slow water movement Too acid	1.00 0.70 0.60 0.50 0.01	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03
118: Thatuna-----	50	Somewhat limited Depth to saturated zone	0.93	Somewhat limited Depth to saturated zone	0.93
Cald-----	30	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.01	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
120: Latahco-----	80	Very limited Depth to saturated zone Flooding Leaching	1.00 0.60 0.50	Very limited Depth to saturated zone Flooding	1.00 1.00
121: Latahco-----	60	Very limited Depth to saturated zone Flooding Leaching	1.00 0.60 0.50	Very limited Depth to saturated zone Flooding	1.00 1.00
Lovell-----	30	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 0.60 0.50 0.50 0.05	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.21
122: Tilma-----	45	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.95 0.50 0.05	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 0.95 0.21
Latah-----	40	Very limited Depth to saturated zone Flooding Slow water movement Runoff	1.00 0.60 0.50 0.40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.37
124: Caldwell-----	60	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 0.60 0.50 0.50 0.01	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
124: Cald-----	25	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.01	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03
125: Lovell-----	55	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 0.60 0.50 0.50 0.05	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.21
Porrett-----	20	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.11	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37
Aquandic Endoaquepts	15	Very limited Depth to saturated zone Flooding Leaching Too acid	1.00 1.00 0.70 0.05	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.21
130: Porrett-----	80	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.11	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37
136: Lovell-----	45	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 0.60 0.50 0.50 0.05	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
136: Porrett-----	40	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.11	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37
141: Miesen-----	80	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.11	Very limited Flooding Depth to saturated zone Too acid	1.00 0.86 0.42
142: Miesen-----	45	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.11	Very limited Flooding Depth to saturated zone Too acid	1.00 0.86 0.42
Ramsdell-----	40	Very limited Depth to saturated zone Flooding Leaching Too acid	1.00 1.00 0.70 0.03	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
143: Miesen, protected, drained-----	80	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.11	Very limited Flooding Depth to saturated zone Too acid	1.00 0.86 0.42
144: Miesen, protected, drained-----	50	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.11	Very limited Flooding Depth to saturated zone Too acid	1.00 0.86 0.42
Ramsdell, protected, drained	35	Very limited Depth to saturated zone Leaching Flooding Too acid	1.00 0.70 0.60 0.03	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Leaching Flooding Too acid	1.00 0.70 0.60 0.22	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.77
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Leaching Flooding Too acid	1.00 0.70 0.60 0.11	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.42
155: Ramsdell-----	80	Very limited Depth to saturated zone Flooding Leaching Too acid	1.00 1.00 0.70 0.03	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Leaching Flooding Too acid	1.00 0.70 0.60 0.03	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Leaching Flooding Too acid	1.00 0.70 0.60 0.03	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
DeVoignes, protected, drained	30	Very limited Depth to saturated zone Too acid Flooding Leaching	1.00 0.62 0.60 0.50	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 1.00
158: DeVoignes-----	45	Very limited Ponding Depth to saturated zone Flooding Too acid Leaching	1.00 1.00 1.00 0.62 0.50	Very limited Ponding Depth to saturated zone Flooding Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
158: Pywell-----	40	Very limited Ponding Depth to saturated zone Flooding Leaching Too acid	 1.00 1.00 1.00 0.70 0.11	Very limited Ponding Depth to saturated zone Flooding Too acid	 1.00 1.00 1.00 0.42
200: Blinn, stony surface	80	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 0.50 0.14 0.01 0.01	Very limited Too acid Slope Droughty Large stones on surface Depth to bedrock	 1.00 1.00 0.14 0.01 0.01
201: Blinn, stony surface	80	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 0.50 0.14 0.01 0.01	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 1.00 0.14 0.01 0.01
202: Blinn, stony surface	55	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 0.50 0.14 0.01 0.01	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 1.00 0.14 0.01 0.01
Bobbitt, stony surface-----	30	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	 1.00 1.00 0.97 0.95 0.50	Very limited Slope Too acid Large stones on surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.97 0.95
210: Agatha, stony surface-----	80	Very limited Slope Too acid	 1.00 0.50	Very limited Too acid Slope	 1.00 1.00
212: Agatha, stony surface-----	80	Very limited Slope Too acid Droughty	 1.00 0.50 0.01	Very limited Slope Too acid Droughty	 1.00 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
230: Lacy, stony surface	65	Very limited Droughty Depth to bedrock Large stones on surface Slope Too acid	 1.00 1.00 1.00 1.00 0.50	Very limited Droughty Depth to bedrock Too acid Large stones on surface Slope	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.50	Very limited Large stones on surface Droughty Slope Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Droughty Depth to bedrock Large stones on surface Slope Too acid	 1.00 1.00 1.00 1.00 0.50	Very limited Droughty Depth to bedrock Too acid Large stones on surface Slope	 1.00 1.00 1.00 1.00 1.00
Bobbitt, stony surface-----	30	Very limited Large stones on surface Slope Droughty Depth to bedrock Too acid	 1.00 1.00 0.97 0.95 0.50	Very limited Too acid Large stones on surface Slope Droughty Depth to bedrock	 1.00 1.00 1.00 0.97 0.95
233: Lacy, very stony surface-----	55	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.50	Very limited Large stones on surface Droughty Slope Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00
Bobbitt, very stony surface-----	30	Very limited Slope Droughty Too acid Large stones on surface Depth to bedrock	 1.00 0.69 0.50 0.27 0.21	Very limited Slope Too acid Droughty Large stones on surface Depth to bedrock	 1.00 1.00 0.69 0.27 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250: Dorb, warm, stony surface-----	80	Very limited Slope Too acid Cobble content	1.00 0.50 0.32	Very limited Slope Too acid Cobble content	1.00 1.00 0.32
255: Shayhill, stony surface-----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.64 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.64
256: Shayhill, stony surface-----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.64 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.64
257: Shayhill, dry, stony surface-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
260: Seddow-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
261: Sly, dry-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Shayhill, dry-----	40	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00
262: Seddow-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Sly, dry-----	40	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
300: Taney-----	80	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.50	Very limited Depth to saturated zone Too acid	1.00 1.00
301: Taney-----	80	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63
303: Carlinton-----	45	Very limited Depth to saturated zone Too acid Runoff Slope	1.00 0.43 0.40 0.16	Very limited Depth to saturated zone Too acid Slope	1.00 0.99 0.16
Benewah-----	40	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.05	Very limited Depth to saturated zone Slope Too acid	1.00 0.63 0.21
304: Benewah-----	45	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.05	Very limited Depth to saturated zone Slope Too acid	1.00 1.00 0.21
Santa-----	35	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63
310: Santa-----	80	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.50	Very limited Depth to saturated zone Too acid	1.00 1.00
311: Santa-----	80	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
314: Sharptop-----	45	Somewhat limited Slope Too acid	0.63 0.50	Very limited Too acid Slope	1.00 0.63
Santa-----	40	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63
315: Setters-----	80	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.97 0.50 0.18	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 0.97 0.67
316: Setters-----	50	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.97 0.50 0.22	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 0.97 0.77
Taney-----	30	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63
320: Reggear-----	80	Very limited Depth to saturated zone Slope Leaching Too acid Droughty	1.00 0.63 0.50 0.50 0.18	Very limited Depth to saturated zone Too acid Slope Droughty	1.00 1.00 0.63 0.18

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
321: Reggear, moist-----	80	Very limited Depth to saturated zone Slope Too acid Runoff Droughty	1.00 0.63 0.50 0.40 0.14	Very limited Depth to saturated zone Too acid Slope Droughty	1.00 1.00 0.63 0.14
322: Reggear, moist-----	50	Very limited Depth to saturated zone Slope Too acid Runoff Droughty	1.00 0.63 0.50 0.40 0.14	Very limited Depth to saturated zone Too acid Slope Droughty	1.00 1.00 0.63 0.14
Sly-----	30	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
323: Bechtel-----	50	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Reggear-----	35	Very limited Slope Depth to saturated zone Leaching Too acid Droughty	1.00 1.00 0.50 0.50 0.18	Very limited Depth to saturated zone Slope Too acid Droughty	1.00 1.00 1.00 0.18
325: Reggear-----	55	Very limited Depth to saturated zone Leaching Too acid Droughty	1.00 0.50 0.50 0.18	Very limited Depth to saturated zone Too acid Droughty	1.00 1.00 0.18
Sharptop, basalt substratum-----	30	Somewhat limited Too acid	0.50	Very limited Too acid	1.00
326: Reggear-----	50	Very limited Depth to saturated zone Slope Leaching Too acid Droughty	1.00 0.63 0.50 0.50 0.18	Very limited Depth to saturated zone Too acid Slope Droughty	1.00 1.00 0.63 0.18
Seddow-----	35	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
330: Carlinton-----	50	Very limited Depth to saturated zone Too acid Runoff Slope	1.00 0.43 0.40 0.16	Very limited Depth to saturated zone Too acid Slope	1.00 0.99 0.16
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Too acid Runoff	1.00 0.63 0.43 0.40	Very limited Depth to saturated zone Too acid Slope	1.00 0.99 0.63
335: Carlinton, dry-----	80	Very limited Depth to saturated zone Slope Too acid Runoff	1.00 0.84 0.43 0.40	Very limited Depth to saturated zone Too acid Slope	1.00 0.99 0.84
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Too acid Runoff	1.00 0.43 0.40	Very limited Depth to saturated zone Too acid	1.00 0.99
Taney-----	25	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.50	Very limited Depth to saturated zone Too acid	1.00 1.00
340: Arson-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Lotuspoint-----	35	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	1.00 1.00 0.99 0.80 0.50	Very limited Too acid Slope Large stones on surface Droughty Depth to bedrock	1.00 1.00 1.00 0.99 0.80
341: Sinkler-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Arson-----	40	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
342: Sinkler, dry-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Arson, dry-----	40	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
350: Southwick-----	80	Somewhat limited Depth to saturated zone Too acid	0.97 0.14	Somewhat limited Depth to saturated zone Too acid	0.97 0.55
351: Southwick-----	80	Somewhat limited Depth to saturated zone Slope Too acid	0.97 0.63 0.14	Somewhat limited Depth to saturated zone Slope Too acid	0.97 0.63 0.55
353: Tensed-----	50	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.32	Very limited Depth to saturated zone Too acid	1.00 0.92
Pedee-----	35	Very limited Slow water movement Depth to saturated zone Leaching Strongly contrasting textural stratification Too acid	1.00 1.00 0.50 0.35 0.11	Very limited Depth to saturated zone Slow water movement Too acid Strongly contrasting textural stratification	1.00 1.00 0.42 0.35
354: Tensed-----	50	Very limited Slope Depth to saturated zone Leaching Too acid	1.00 1.00 0.50 0.32	Very limited Depth to saturated zone Slope Too acid	1.00 1.00 0.92
Pedee-----	35	Very limited Slope Slow water movement Depth to saturated zone Leaching Strongly contrasting textural stratification	1.00 1.00 1.00 0.50 0.35	Very limited Depth to saturated zone Slope Slow water movement Too acid Strongly contrasting textural stratification	1.00 1.00 1.00 0.42 0.35

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
355: Southwick-----	55	Somewhat limited Depth to saturated zone Too acid Slope	0.97 0.14 0.04	Somewhat limited Depth to saturated zone Too acid Slope	0.97 0.55 0.04
Driscoll-----	30	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.79 0.50 0.18	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 0.79 0.67
356: Southwick-----	55	Very limited Slope Depth to saturated zone Too acid	1.00 0.97 0.14	Very limited Slope Depth to saturated zone Too acid	1.00 0.97 0.55
Driscoll-----	30	Very limited Slope Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching	1.00 1.00 1.00 0.79 0.50	Very limited Depth to saturated zone Slope Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 1.00 0.79 0.67
360: Larkin-----	80	Somewhat limited Too acid	0.14	Somewhat limited Too acid	0.55
361: Larkin-----	80	Very limited Slope Too acid	1.00 0.14	Very limited Slope Too acid	1.00 0.55
363: Larkin-----	55	Somewhat limited Too acid	0.14	Somewhat limited Too acid	0.55

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363: Driscoll-----	30	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.79 0.50 0.18	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid Slope	1.00 1.00 0.79 0.67 0.04
364: Larkin-----	50	Somewhat limited Too acid	0.14	Somewhat limited Too acid	0.55
Southwick-----	35	Somewhat limited Depth to saturated zone Too acid	0.97 0.14	Somewhat limited Depth to saturated zone Too acid	0.97 0.55
367: Larkin-----	55	Very limited Slope Too acid	1.00 0.14	Very limited Slope Too acid	1.00 0.55
Driscoll-----	30	Very limited Slow water movement Depth to saturated zone Slope Strongly contrasting textural stratification Leaching	1.00 1.00 1.00 0.79 0.50	Very limited Depth to saturated zone Slow water movement Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00 0.79 0.67
400: Driscoll-----	80	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Slope Leaching	1.00 1.00 0.79 0.63 0.50	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid Slope	1.00 1.00 0.79 0.67 0.63
405: Thatuna-----	45	Somewhat limited Slope Depth to saturated zone	0.96 0.93	Somewhat limited Slope Depth to saturated zone	0.96 0.93

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
405: Naff-----	40	Somewhat limited Slope Slow water movement	0.63 0.50	Somewhat limited Slope Slow water movement	0.63 0.37
406: Thatuna-----	50	Very limited Slope Depth to saturated zone	1.00 0.93	Very limited Slope Depth to saturated zone	1.00 0.93
Naff-----	40	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Slow water movement	1.00 0.37
410: Palouse-----	50	Somewhat limited Slow water movement Too acid	0.50 0.22	Somewhat limited Too acid Slow water movement	0.77 0.37
Naff-----	35	Somewhat limited Slow water movement	0.50	Somewhat limited Slow water movement	0.37
411: Palouse-----	80	Somewhat limited Slope Slow water movement Too acid	0.63 0.50 0.22	Somewhat limited Too acid Slope Slow water movement	0.77 0.63 0.37
414: Naff-----	45	Somewhat limited Slow water movement	0.50	Somewhat limited Slow water movement	0.37
Thatuna-----	40	Somewhat limited Depth to saturated zone	0.93	Somewhat limited Depth to saturated zone	0.93
415: Naff-----	50	Somewhat limited Slow water movement Slope	0.50 0.16	Somewhat limited Slow water movement Slope	0.37 0.16
Tilma-----	35	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Slope	1.00 1.00 0.95 0.50 0.16	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid Slope	1.00 1.00 0.95 0.21 0.16

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
416: Naff-----	45	Somewhat limited Slope Slow water movement	0.63 0.50	Somewhat limited Slope Slow water movement	0.63 0.37
Thatuna-----	40	Somewhat limited Slope Depth to saturated zone	0.96 0.93	Somewhat limited Slope Depth to saturated zone	0.96 0.93
417: Naff-----	45	Somewhat limited Slope Slow water movement	0.63 0.50	Somewhat limited Slope Slow water movement	0.63 0.37
Palouse-----	40	Very limited Slope Slow water movement Too acid	1.00 0.50 0.22	Very limited Slope Too acid Slow water movement	1.00 0.77 0.37
420: Garfield-----	45	Very limited Slow water movement Slope Too acid	1.00 1.00 0.02	Very limited Slow water movement Slope Too acid	1.00 1.00 0.08
Tilma-----	35	Very limited Slow water movement Depth to saturated zone Strongly contrasting textural stratification Leaching Too acid	1.00 1.00 0.95 0.50 0.05	Very limited Depth to saturated zone Slow water movement Strongly contrasting textural stratification Too acid	1.00 1.00 0.95 0.21
421: Naff-----	55	Somewhat limited Slow water movement Slope	0.50 0.16	Somewhat limited Slow water movement Slope	0.37 0.16
Garfield-----	30	Very limited Slow water movement Slope Too acid	1.00 1.00 0.02	Very limited Slow water movement Slope Too acid	1.00 1.00 0.08

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
500: Hobo-----	50	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00 1.00
Threebear-----	35	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63 0.63
501: Hobo, warm-----	45	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00 1.00
Threebear, warm-----	40	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00 1.00
510: Honeyjones-----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90 0.90
Ahrs-----	35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46 0.46
600: Ardenvoir-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
Huckle-----	35	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
601: Ardenvoir-----	55	Very limited Slope Too acid Droughty	 1.00 0.50 0.02	Very limited Slope Too acid Droughty	 1.00 1.00 0.02
McCrosket-----	25	Very limited Slope Too acid Droughty	 1.00 0.50 0.12	Very limited Slope Too acid Droughty	 1.00 1.00 0.12
605: Benewah-----	45	Very limited Depth to saturated zone Slope Leaching Too acid	 1.00 0.63 0.50 0.05	Very limited Depth to saturated zone Slope Too acid	 1.00 0.63 0.21
Rasser-----	35	Very limited Strongly contrasting textural stratification Slope Too acid	 1.00 0.63 0.50	Very limited Strongly contrasting textural stratification Too acid Slope	 1.00 1.00 0.63
606: Benewah-----	45	Very limited Slope Depth to saturated zone Leaching Too acid	 1.00 1.00 0.50 0.05	Very limited Depth to saturated zone Slope Too acid	 1.00 1.00 0.21
Rasser-----	40	Very limited Slope Strongly contrasting textural stratification Too acid	 1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	 1.00 1.00 1.00
610: Schumacher-----	80	Somewhat limited Slope Too acid	 0.63 0.50	Very limited Too acid Slope	 1.00 0.63
611: Schumacher-----	45	Very limited Slope Too acid	 1.00 0.50	Very limited Slope Too acid	 1.00 1.00
Tekoa-----	40	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612: Libertybutte-----	45	Very limited Depth to bedrock Droughty Slope Runoff Too acid	 1.00 1.00 1.00 0.40 0.01	Very limited Depth to bedrock Droughty Slope Too acid	 1.00 1.00 1.00 0.01
Tekoa-----	40	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21
613: Ardenvoir, dry-----	50	Very limited Strongly contrasting textural stratification Slope Too acid	 1.00 1.00 0.50	Very limited Strongly contrasting textural stratification Too acid Slope	 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	 1.00 1.00 0.99 0.80 0.50	Very limited Too acid Large stones on surface Slope Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.80
614: Ardenvoir, dry-----	50	Very limited Slope Strongly contrasting textural stratification Too acid	 1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	 1.00 1.00 0.99 0.80 0.50	Very limited Slope Too acid Large stones on surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.80
617: Tekoa-----	80	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21	Very limited Slope Droughty Depth to bedrock	 1.00 0.87 0.21
621: Huckle-----	80	Very limited Slope Too acid	 1.00 0.50	Very limited Slope Too acid	 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
625: Huckle-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Ardenvoir-----	40	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
650: Grangemont-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
651: Kingspeak-----	55	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Shayhill, stony surface-----	30	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.64 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.64
652: Kingspeak-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
653: Kingspeak, cool-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
655: Tigley, moist-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
656: Kingspeak, dry-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
660: Threebear-----	80	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.50	Very limited Depth to saturated zone Too acid	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
662: Threebear, warm-----	80	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 0.63 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63
663: Threebear, warm-----	50	Very limited Depth to saturated zone Leaching Too acid	1.00 0.50 0.50	Very limited Depth to saturated zone Too acid	1.00 1.00
Porrett-----	35	Very limited Depth to saturated zone Flooding Slow water movement Leaching Too acid	1.00 1.00 0.50 0.50 0.11	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37
665: Grangemont, warm----	80	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
670: Honeyjones, warm----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
671: Honeyjones-----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
680: Ardenvoir-----	45	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Too acid Slope Droughty	1.00 1.00 0.02
Huckle-----	40	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
681: Huckle-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Ahrs-----	35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Too acid Slope Strongly contrasting textural stratification	1.00 1.00 0.46
700: Ardenvoir-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
Huckle-----	35	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
701: Ardenvoir-----	55	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
McCrosket-----	25	Very limited Slope Too acid Droughty	1.00 0.50 0.12	Very limited Slope Too acid Droughty	1.00 1.00 0.12
703: Ardenvoir, dry-----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00
Ardenvoir-----	40	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
704: Ardenvoir, dry-----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
704: Ardenvoir-----	40	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
705: Ardenvoir-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
Rasser-----	30	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00
706: Ardenvoir-----	80	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
707: Huckle, dry-----	50	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Ardenvoir-----	35	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
710: McCrosket-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.12	Very limited Slope Too acid Droughty	1.00 1.00 0.12
Ardenvoir-----	30	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
711: McCrosket-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.12	Very limited Slope Too acid Droughty	1.00 1.00 0.12
Ardenvoir-----	30	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
712: McCrosket-----	50	Very limited Slope Too acid Droughty	1.00 0.50 0.12	Very limited Slope Too acid Droughty	1.00 1.00 0.12
Tekoa-----	30	Very limited Slope Droughty Depth to bedrock	1.00 0.87 0.21	Very limited Slope Droughty Depth to bedrock	1.00 0.87 0.21
716: Ahhs-----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
720: Huckle-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
721: Huckle-----	50	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Ardenvoir-----	35	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
735: Lotuspoint, stony surface-----	80	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	1.00 1.00 0.99 0.80 0.50	Very limited Slope Too acid Large stones on surface Droughty Depth to bedrock	1.00 1.00 1.00 0.99 0.80
736: Lotuspoint, stony surface-----	65	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	1.00 1.00 0.99 0.80 0.50	Very limited Slope Too acid Large stones on surface Droughty Depth to bedrock	1.00 1.00 1.00 0.99 0.80
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
756: Tigley-----	80	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
757: Hugus, warm-----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.01	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Hugus-----	35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.35
765: Saint Maries-----	45	Very limited Slope Strongly contrasting textural stratification Too acid Droughty	1.00 0.97 0.50 0.23	Very limited Slope Too acid Strongly contrasting textural stratification Droughty	1.00 1.00 0.97 0.23
Huckle-----	35	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
770: Pinecreek-----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
771: Honeyjones, warm----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
772: Honeyjones, warm----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
Ahrs-----	35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46 	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
773: Honeyjones, dry-----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
774: Pinecreek, moist----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46 	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
775: Pinecreek, moist----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46 	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
776: Cassychill-----	80	Very limited Slope Droughty Depth to bedrock Too acid Runoff	1.00 1.00 1.00 0.50 0.40	Very limited Droughty Slope Depth to bedrock Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
777: Bouldercreek, warm--	80	Very limited Slope Filtering capacity Strongly contrasting textural stratification Too acid	1.00 1.00 1.00 0.50	Very limited Filtering capacity Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00 1.00
778: Cassyhill-----	50	Very limited Droughty Depth to bedrock Slope Too acid Runoff	1.00 1.00 1.00 0.50 0.40	Very limited Droughty Depth to bedrock Too acid Slope	1.00 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	1.00 1.00 0.99 0.80 0.50	Very limited Too acid Large stones on surface Slope Droughty Depth to bedrock	1.00 1.00 1.00 0.99 0.80
779: Bouldercreek-----	80	Very limited Slope Strongly contrasting textural stratification Too acid Droughty	1.00 1.00 0.50 0.03	Very limited Slope Strongly contrasting textural stratification Too acid Droughty	1.00 1.00 1.00 0.03
780: Ardenvoir-----	30	Very limited Slope Too acid Droughty	1.00 0.50 0.02	Very limited Slope Too acid Droughty	1.00 1.00 0.02
Huckle-----	30	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Saint Maries, dry---	30	Very limited Slope Too acid Droughty	1.00 0.50 0.12	Very limited Slope Too acid Droughty	1.00 1.00 0.12
781: Ahhs, moist-----	45	Very limited Slope Cobble content Too acid Strongly contrasting textural stratification	1.00 0.87 0.50 0.10	Very limited Slope Too acid Cobble content Strongly contrasting textural stratification	1.00 1.00 0.87 0.10

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Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
781: Honeyjones, warm----	35	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
782: Ardenvoir, dry-----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00
Cassyhill-----	35	Very limited Slope Droughty Depth to bedrock Too acid Runoff	1.00 1.00 1.00 0.50 0.40	Very limited Droughty Slope Depth to bedrock Too acid	1.00 1.00 1.00 1.00
784: Pinecreek, moist----	45	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46 	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
Lotuspoint-----	35	Very limited Slope Large stones on surface Droughty Depth to bedrock Too acid	1.00 1.00 0.99 0.80 0.50	Very limited Slope Too acid Large stones on surface Droughty Depth to bedrock	1.00 1.00 1.00 0.99 0.80
791: Latour-----	80	Very limited Slope Strongly contrasting textural stratification Too acid Large stones on surface	1.00 1.00 0.50 0.02	Very limited Slope Strongly contrasting textural stratification Too acid Large stones on surface	1.00 1.00 1.00 0.02
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
802: Kingspeak-----	50	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Depth to saturated zone Flooding Leaching Too acid	1.00 1.00 0.70 0.05	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.21
Aquic Udifluvents---	40	Very limited Filtering capacity Depth to saturated zone Strongly contrasting textural stratification Flooding Droughty	1.00 0.99 0.97 0.60 0.11	Very limited Filtering capacity Flooding Depth to saturated zone Strongly contrasting textural stratification Too acid	1.00 1.00 0.99 0.97 0.21
902: Ahrs-----	80	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
903: Ahrs-----	50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
Pinecreek-----	30	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
907: Honeyjones-----	80	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
908: Honeyjones-----	45	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 0.90 0.50	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.90
Ahrs-----	35	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 0.50 0.46	Very limited Slope Too acid Strongly contrasting textural stratification	1.00 1.00 0.46
913: Hobo-----	85	Very limited Slope Depth to saturated zone Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Slope Too acid	1.00 1.00 1.00
Ac1: Arson-----	40	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Carlinton-----	35	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00
Ac2: Arson, dry-----	45	Very limited Slope Too acid	1.00 0.50	Very limited Too acid Slope	1.00 1.00
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 9.--Agricultural Disposal of Manure, Food-Processing Waste, and Sewage Sludge--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Arson, dry-----	55	Very limited Slope Too acid	1.00 0.50	Very limited Slope Too acid	1.00 1.00
Minaloosa, dry-----	20	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 0.50	Very limited Slope Strongly contrasting textural stratification Too acid	1.00 1.00 1.00
Rs2: Reggear, moist-----	40	Very limited Depth to saturated zone Slope Leaching Too acid	1.00 1.00 0.50 0.50	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 1.00
Stewah-----	25	Very limited Strongly contrasting textural stratification Slope Too acid	1.00 1.00 0.50	Very limited Strongly contrasting textural stratification Too acid Slope	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.---Agricultural Disposal of Wastewater by Irrigation and Overland Flow

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Filtering capacity Depth to saturated zone Flooding Too acid Droughty	1.00 0.86 0.60 0.21 0.11	Very limited Seepage Flooding Depth to saturated zone Cobble content Too acid	1.00 1.00 0.86 0.31 0.21
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Flooding Droughty Too acid	1.00 0.60 0.09 0.03	Very limited Seepage Depth to saturated zone Flooding Too acid Cobble content	1.00 1.00 1.00 0.03 0.02
116: Thatuna-----	45	Somewhat limited Depth to saturated zone	0.93	Very limited Seepage Depth to saturated zone	1.00 0.93
Caldwell-----	35	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.37 0.03	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.03
118: Thatuna-----	50	Somewhat limited Depth to saturated zone Too steep for surface application	0.93 0.32	Very limited Seepage Depth to saturated zone	1.00 0.93
Cald-----	30	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
120: Latahco-----	80	Very limited Depth to saturated zone Flooding	1.00 0.60	Very limited Seepage Depth to saturated zone Flooding	1.00 1.00 1.00
121: Latahco-----	60	Very limited Depth to saturated zone Flooding	1.00 0.60	Very limited Seepage Depth to saturated zone Flooding	1.00 1.00 1.00
Lovell-----	30	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.37 0.21	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.21
122: Tilma-----	45	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 0.21	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 0.21
Latah-----	40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.60 0.37	Very limited Seepage Depth to saturated zone Flooding	1.00 1.00 1.00
124: Caldwell-----	60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.37 0.03	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.03
Cald-----	25	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.37 0.03	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
125: Lovell-----	55	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.37 0.21	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.21
Porrett-----	20	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37	Very limited Depth to saturated zone Flooding Seepage Too acid	1.00 1.00 0.62 0.42
Aquandic Endoaquepts	15	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.21	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.21
130: Porrett-----	80	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37	Very limited Depth to saturated zone Flooding Seepage Too acid	1.00 1.00 0.62 0.42
136: Lovell-----	45	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.37 0.21	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.21
Porrett-----	40	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.37	Very limited Depth to saturated zone Flooding Seepage Too acid	1.00 1.00 0.62 0.42
141: Miesen-----	80	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42	Very limited Seepage Flooding Depth to saturated zone Too acid	1.00 1.00 0.86 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
142: Miesen-----	45	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42	Very limited Seepage Flooding Depth to saturated zone Too acid	1.00 1.00 0.86 0.42
Ramsdell-----	40	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.14
143: Miesen, protected, drained-----	80	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42	Very limited Seepage Flooding Depth to saturated zone Too acid	1.00 1.00 0.86 0.42
144: Miesen, protected, drained-----	50	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42	Very limited Seepage Flooding Depth to saturated zone Too acid	1.00 1.00 0.86 0.42
Ramsdell, protected, drained	35	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.14
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Too acid Flooding	1.00 0.77 0.60	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.77
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.42	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
155: Ramsdell-----	80	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.14
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.14
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14	Very limited Seepage Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.14
DeVoignes, protected, drained	30	Very limited Depth to saturated zone Too acid Flooding	1.00 1.00 0.60	Very limited Seepage Depth to saturated zone Too acid Flooding	1.00 1.00 1.00 1.00
158: DeVoignes-----	45	Very limited Ponding Depth to saturated zone Too acid Flooding	1.00 1.00 1.00 1.00	Very limited Seepage Ponding Depth to saturated zone Too acid Flooding	1.00 1.00 1.00 1.00
Pywell-----	40	Very limited Ponding Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.42	Very limited Seepage Ponding Depth to saturated zone Flooding Too level	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
200: Blinn, stony surface	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application Droughty Large stones on surface	 1.00 1.00 1.00 0.14 0.01	Very limited Seepage Depth to bedrock Too acid Stone content Too steep for surface application	 1.00 1.00 1.00 1.00 1.00
201: Blinn, stony surface	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty Large stones on surface	 1.00 1.00 1.00 0.14 0.01	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	 1.00 1.00 1.00 1.00 1.00
202: Blinn, stony surface	55	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty Large stones on surface	 1.00 1.00 1.00 0.14 0.01	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	 1.00 1.00 1.00 1.00 1.00
Bobbitt, stony surface-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface Droughty	 1.00 1.00 1.00 1.00 0.97	Very limited Seepage Too steep for surface application Stone content Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
210: Agatha, stony surface-----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	1.00 1.00 1.00 0.94
212: Agatha, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.94
230: Lacy, stony surface	65	Very limited Droughty Depth to bedrock Too acid Large stones on surface Too steep for surface application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Stone content Too acid Too steep for surface application	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Large stones on surface Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content Too acid	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
232: Lacy, stony surface	55	Very limited Droughty Depth to bedrock Too acid Large stones on surface Too steep for surface application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Stone content Too acid Too steep for surface application	 1.00 1.00 1.00 1.00 1.00
Bobbitt, stony surface-----	30	Very limited Too acid Large stones on surface Too steep for surface application Too steep for sprinkler application Droughty	 1.00 1.00 1.00 1.00 1.00 0.97	Very limited Seepage Stone content Depth to bedrock Too acid Too steep for surface application	 1.00 1.00 1.00 1.00 1.00
233: Lacy, very stony surface-----	55	Very limited Large stones on surface Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content Too acid	 1.00 1.00 1.00 1.00 1.00
Bobbitt, very stony surface-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty Large stones on surface	 1.00 1.00 1.00 1.00 0.69 0.27	Very limited Seepage Too steep for surface application Stone content Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250: Dorb, warm, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Cobble content	1.00 1.00 1.00 0.32	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 1.00 1.00
255: Shayhill, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Stone content Cobble content	1.00 1.00 1.00 0.79 0.16
256: Shayhill, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Stone content Cobble content	1.00 1.00 1.00 0.82 0.11
257: Shayhill, dry, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.87
260: Seddow-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.84

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
261: Sly, dry-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Shayhill, dry-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Stone content	1.00 1.00 1.00 0.46 0.34
262: Seddow-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.84
Sly, dry-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
300: Taney-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 1.00
301: Taney-----	80	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.99 0.40	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.99 0.78
Benewah-----	40	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 0.78 0.21	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.21
304: Benewah-----	45	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 0.21	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.21
Santa-----	35	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
310: Santa-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
311: Santa-----	80	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
314: Sharptop-----	45	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.78	Very limited Seepage Too acid Too steep for Too acid surface application Depth to bedrock	1.00 1.00 1.00 1.00 0.54
314: Santa-----	40	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
315: Setters-----	80	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.67 0.10	Very limited Depth to saturated zone Too acid Seepage Too steep for surface application	1.00 0.67 0.62 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Setters-----	50	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.77 0.10	Very limited Depth to saturated zone Too acid Seepage Too steep for surface application	1.00 0.77 0.62 0.22
Taney-----	30	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
320: Reggear-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.78 0.18	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
321: Reggear, moist-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.78 0.14	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
322: Reggear, moist-----	50	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.78 0.14	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
Sly-----	30	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
323: Bechtel-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.05
Reggear-----	35	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 1.00 0.18	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 1.00
325: Reggear-----	55	Very limited Depth to saturated zone Too acid Too steep for surface application Droughty	1.00 1.00 0.32 0.18	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325: Sharptop, basalt substratum-----	30	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 0.10	Very limited Seepage Too acid Depth to bedrock Too steep for surface application	1.00 1.00 0.71 0.22
326: Reggear-----	50	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.78 0.18	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
Seddow-----	35	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	1.00 1.00 1.00 0.84
330: Carlinton-----	50	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.99 0.40	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.99 0.78
Carlinton, dry-----	30	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.99 0.78	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.99

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
335: Carlinton, dry-----	80	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.99 0.90	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.99
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 0.99 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 0.99
Taney-----	25	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 1.00
340: Arson-----	45	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.02
Lotuspoint-----	35	Very limited Too steep for surface application Too acid Too steep for sprinkler application Large stones on surface Droughty	1.00 1.00 1.00 1.00 1.00 0.99	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Stone content	1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
341: Sinkler-----	45	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Arson-----	40	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.02
342: Sinkler, dry-----	45	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Arson, dry-----	40	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.02
350: Southwick-----	80	Somewhat limited Depth to saturated zone Too acid Too steep for surface application	0.97 0.55 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 0.97 0.55
351: Southwick-----	80	Very limited Too steep for surface application Depth to saturated zone Too steep for sprinkler application Too acid	1.00 0.97 0.78 0.55	Very limited Seepage Too steep for surface application Depth to saturated zone Too acid	1.00 1.00 0.97 0.55

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
353: Tensed-----	50	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 0.92 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 0.92
Pedee-----	35	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.42 0.10	Very limited Depth to saturated zone Seepage Too acid Too steep for surface application	1.00 0.62 0.42 0.22
354: Tensed-----	50	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00 0.92	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.92
Pedee-----	35	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Slow water movement Too acid	1.00 1.00 1.00 1.00 0.42	Very limited Depth to saturated zone Too steep for surface application Seepage Too acid	1.00 1.00 0.62 0.42
355: Southwick-----	55	Very limited Too steep for surface application Depth to saturated zone Too acid Too steep for sprinkler application	1.00 0.97 0.55 0.22	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 0.97 0.55 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
355: Driscoll-----	30	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.92 0.67 0.03	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.67 0.06
356: Southwick-----	55	Very limited Too steep for surface application Too steep for sprinkler application Depth to saturated zone Too acid	1.00 1.00 1.00 0.97 0.55	Very limited Seepage Too steep for surface application Depth to saturated zone Too acid	1.00 1.00 0.97 0.55
Driscoll-----	30	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Slow water movement Too acid	1.00 1.00 1.00 1.00 0.67	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.67
360: Larkin-----	80	Somewhat limited Too steep for surface application Too acid Too steep for sprinkler application	0.92 0.55 0.03	Very limited Seepage Too acid Too steep for surface application	1.00 0.55 0.06
361: Larkin-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 0.55	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.55

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363: Larkin-----	55	Somewhat limited Too steep for surface application Too acid	0.68 0.55	Very limited Seepage Too acid	1.00 0.55
Driscoll-----	30	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 0.67 0.22	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.67 0.50
364: Larkin-----	50	Somewhat limited Too steep for surface application Too acid Too steep for sprinkler application	0.92 0.55 0.03	Very limited Seepage Too acid Too steep for surface application	1.00 0.55 0.06
Southwick-----	35	Somewhat limited Depth to saturated zone Too steep for surface application Too acid	0.97 0.68 0.55	Very limited Seepage Depth to saturated zone Too acid	1.00 0.97 0.55
367: Larkin-----	55	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 0.55	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.55
Driscoll-----	30	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00 0.67	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.67

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
400: Driscoll-----	80	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too steep for sprinkler application Too acid	1.00 1.00 1.00 0.78 0.67	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.67
405: Thatuna-----	45	Very limited Too steep for surface application Too steep for sprinkler application Depth to saturated zone	1.00 0.98 0.93	Very limited Seepage Too steep for surface application Depth to saturated zone	1.00 1.00 0.93
Naff-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.78 0.37	Very limited Too steep for surface application Seepage	1.00 0.62
406: Thatuna-----	50	Very limited Too steep for surface application Too steep for sprinkler application Depth to saturated zone	1.00 1.00 0.93	Very limited Seepage Too steep for surface application Depth to saturated zone	1.00 1.00 0.93
Naff-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.37	Very limited Too steep for surface application Seepage	1.00 0.62

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
410: Palouse-----	50	Somewhat limited Too acid Slow water movement Too steep for surface application	 0.77 0.37 0.08	Somewhat limited Too acid Seepage	 0.77 0.62
Naff-----	35	Somewhat limited Slow water movement Too steep for surface application	 0.37 0.32	Somewhat limited Seepage	 0.62
411: Palouse-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Slow water movement	 1.00 0.78 0.77 0.37	Very limited Too steep for surface application Too acid Seepage	 1.00 0.77 0.62
414: Naff-----	45	Somewhat limited Slow water movement Too steep for surface application	 0.37 0.32	Somewhat limited Seepage	 0.62
Thatuna-----	40	Somewhat limited Depth to saturated zone Too steep for surface application	 0.93 0.32	Very limited Seepage Depth to saturated zone	 1.00 0.93
415: Naff-----	50	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	 1.00 0.40 0.37	Somewhat limited Too steep for surface application Seepage	 0.78 0.62

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
415: Tilma-----	35	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 0.40 0.21	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 0.78 0.21
416: Naff-----	45	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.78 0.37	Very limited Too steep for surface application Seepage	1.00 0.62
Thatuna-----	40	Very limited Too steep for surface application Too steep for sprinkler application Depth to saturated zone	1.00 0.98 0.93	Very limited Seepage Too steep for surface application Depth to saturated zone	1.00 1.00 0.93
417: Naff-----	45	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.78 0.37	Very limited Too steep for surface application Seepage	1.00 0.62
Palouse-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid Slow water movement	1.00 1.00 0.77 0.37	Very limited Too steep for surface application Too acid Seepage	1.00 0.77 0.62

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
420: Garfield-----	45	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00 0.08	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.08
Tilma-----	35	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid	1.00 1.00 0.68 0.21	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 0.21
421: Naff-----	55	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.40 0.37	Somewhat limited Too steep for surface application Seepage	0.78 0.62
Garfield-----	30	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00 0.08	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.08
500: Hobo-----	50	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
500: Threebear-----	35	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
501: Hobo, warm-----	45	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
Threebear, warm-----	40	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
510: Honeyjones-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Ahrs-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.57

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
600: Ardenvoir-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
Huckle-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
601: Ardenvoir-----	55	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
McCrosket-----	25	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.96 0.91
605: Benewah-----	45	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 0.78 0.21	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
605: Rasser-----	35	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 0.78	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
606: Benewah-----	45	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 0.21	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	 1.00 1.00 1.00 0.21
Rasser-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 1.00
610: Schumacher-----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 0.78	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	 1.00 1.00 1.00 0.71
611: Schumacher-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	 1.00 1.00 1.00 0.71
Tekoa-----	40	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	 1.00 1.00 0.87 0.21	Very limited Seepage Too steep for surface application Depth to bedrock Cobble content	 1.00 1.00 1.00 0.43

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612: Libertybutte-----	45	Very limited Depth to bedrock Droughty Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application Too acid	 1.00 1.00 1.00 0.01
Tekoa-----	40	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	 1.00 1.00 0.87 0.21	Very limited Seepage Depth to bedrock Too steep for surface application Cobble content	 1.00 1.00 1.00 0.43
613: Ardenvoir, dry-----	50	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Cobble content	 1.00 1.00 1.00 0.87
Lotuspoint-----	35	Very limited Too acid Too steep for surface application Large stones on surface Too steep for sprinkler application Droughty	 1.00 1.00 1.00 1.00 0.99	Very limited Seepage Depth to bedrock Too acid Too steep for surface application Stone content	 1.00 1.00 1.00 1.00 1.00
614: Ardenvoir, dry-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
614: Lotuspoint-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface Droughty	1.00 1.00 1.00 1.00 1.00 0.99	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	1.00 1.00 1.00 1.00 1.00
617: Tekoa-----	80	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	1.00 1.00 0.87 0.21	Very limited Seepage Too steep for surface application Depth to bedrock Cobble content	1.00 1.00 1.00 0.43
621: Huckle-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
625: Huckle-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
Ardenvoir-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
650: Grangemont-----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
651: Kingspeak-----	55	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
Shayhill, stony surface-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Stone content Cobble content	 1.00 1.00 1.00 0.79 0.16
652: Kingspeak-----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
653: Kingspeak, cool----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
655: Tigley, moist-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
656: Kingspeak, dry-----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
660: Threebear-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application	 1.00 1.00 0.68	Very limited Seepage Depth to saturated zone Too acid	 1.00 1.00 1.00
662: Threebear, warm-----	80	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 0.78	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	 1.00 1.00 1.00 1.00
663: Threebear, warm-----	50	Very limited Depth to saturated zone Too acid Too steep for surface application	 1.00 1.00 0.08	Very limited Seepage Depth to saturated zone Too acid	 1.00 1.00 1.00
Porrett-----	35	Very limited Depth to saturated zone Flooding Too acid Slow water movement	 1.00 1.00 0.42 0.37	Very limited Depth to saturated zone Flooding Seepage Too acid	 1.00 1.00 0.62 0.42
665: Grangemont, warm----	80	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
670: Honeyjones, warm----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
671: Honeyjones-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
680: Ardenvoir-----	45	Very limited Too acid Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too acid Too steep for surface application Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
Huckle-----	40	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
681: Huckle-----	45	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
Ahrs-----	35	Very limited Too acid Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Cobble content	1.00 1.00 1.00 0.57

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Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
700: Ardenvoir-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
Huckle-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
701: Ardenvoir-----	55	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
McCrosket-----	25	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.96 0.91
703: Ardenvoir, dry-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.87
Ardenvoir-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
704: Ardenvoir, dry-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.87
Ardenvoir-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
705: Ardenvoir-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
Rasser-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
706: Ardenvoir-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
707: Huckle, dry-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
Ardenvoir-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
710: McCrosket-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.96 0.91
Ardenvoir-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
711: McCrosket-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.96 0.91

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
711: Ardenvoir-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
712: McCrosket-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.96 0.91
Tekoa-----	30	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	1.00 1.00 0.87 0.21	Very limited Seepage Too steep for surface application Depth to bedrock Cobble content	1.00 1.00 1.00 0.43
716: Ahrs-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.57
720: Huckle-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
721: Huckle-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
Ardenvoir-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
735: Lotuspoint, stony surface-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface Droughty	1.00 1.00 1.00 1.00 0.99	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	1.00 1.00 1.00 1.00 1.00
736: Lotuspoint, stony surface-----	65	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface Droughty	1.00 1.00 1.00 1.00 0.99	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
756: Tigley-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
757: Hugus, warm-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
758: Tigley, moist-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Hugus-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
765: Saint Maries-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.23	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.26
Huckle-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
770: Pinecreek-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
771: Honeyjones, warm----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
772: Honeyjones, warm----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Ahrs-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.57
773: Honeyjones, dry-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
774: Pinecreek, moist----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
775: Pinecreek, moist----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
776: Cassyhill-----	80	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 1.00 0.01
777: Boulder creek, warm--	80	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 1.00
778: Cassyhill-----	50	Very limited Droughty Depth to bedrock Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too acid Too steep for surface application Cobble content	 1.00 1.00 1.00 1.00 0.01
Lotuspoint-----	35	Very limited Too acid Too steep for surface application Large stones on surface Too steep for sprinkler application Droughty	 1.00 1.00 1.00 1.00 0.99	Very limited Seepage Depth to bedrock Too acid Too steep for surface application Stone content	 1.00 1.00 1.00 1.00 1.00
779: Boulder creek-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	 1.00 1.00 1.00 1.00 0.03	Very limited Seepage Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 0.84

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
780: Ardenvoir-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.61 0.06
Huckle-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content Depth to bedrock	1.00 1.00 1.00 0.71 0.71
Saint Maries, dry---	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid Droughty	1.00 1.00 1.00 0.12	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 1.00
781: Ahrs, moist-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid Cobble content	1.00 1.00 1.00 0.87	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.74
Honeyjones, warm----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
782: Ardenvoir, dry-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
782: Cassychill-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 1.00 0.01
784: Pinecreek, moist----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface Droughty	 1.00 1.00 1.00 1.00 0.99	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	 1.00 1.00 1.00 1.00 1.00
791: Latour-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid Large stones on surface	 1.00 1.00 1.00 0.02	Very limited Seepage Too steep for surface application Cobble content Too acid Stone content	 1.00 1.00 1.00 1.00 0.60
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
802: Kingspeak-----	50	Very limited Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application	 1.00 1.00 1.00
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Depth to saturated zone Flooding Too acid	 1.00 1.00 0.21	Very limited Seepage Depth to saturated zone Flooding Too acid	 1.00 1.00 1.00 0.21
Aquic Udifluvents---	40	Very limited Filtering capacity Depth to saturated zone Flooding Too acid Droughty	 1.00 0.99 0.60 0.21 0.11	Very limited Seepage Flooding Depth to saturated zone Cobble content Too acid	 1.00 1.00 0.99 0.31 0.21
902: Ahrs-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 0.57
903: Ahrs-----	50	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 0.57
Pinecreek-----	30	Very limited Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
907: Honeyjones-----	80	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
908: Honeyjones-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00
Ahrs-----	35	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.57
913: Hobo-----	85	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too steep for surface application Too acid	1.00 1.00 1.00 1.00
Ac1: Arson-----	40	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.61

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Ac1: Carlinton-----	35	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
Ac2: Arson, dry-----	45	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	1.00 1.00 1.00 0.61
Carlinton, dry-----	30	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 1.00 1.00
An4: Arson, dry-----	55	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 1.00 0.61
Minaloosa, dry-----	20	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 10.--Agricultural Disposal of Wastewater by Irrigation and Overland Flow--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Rs2: Reggear, moist-----	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to saturated zone	1.00
		Too acid	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	1.00
Stewah-----	25	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	1.00

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Table 11.---Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Depth to saturated zone Slow water movement Cobble content Flooding	1.00 1.00 0.86 0.60	Very limited Filtering capacity Depth to saturated zone Flooding Too acid	1.00 0.86 0.60 0.21
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Slow water movement Cobble content Flooding	1.00 1.00 0.85 0.60	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.03
116: Thatuna-----	45	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Somewhat limited Depth to saturated zone	0.93
Caldwell-----	35	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.26 0.03
118: Thatuna-----	50	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Somewhat limited Depth to saturated zone Too steep for surface application	0.93 0.32
Cald-----	30	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.26 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
120: Latahco-----	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding	1.00 0.60
121: Latahco-----	60	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding	1.00 0.60
Lovell-----	30	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.26 0.21
122: Tilma-----	45	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slow water movement Too acid	1.00 0.96 0.21
Latah-----	40	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.60 0.26
124: Caldwell-----	60	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.26 0.03
Cald-----	25	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 1.00 0.26 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
125: Lovell-----	55	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.26 0.21
Porrett-----	20	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.26
Aquandic Endoaquepts	15	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.21
130: Porrett-----	80	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.26
136: Lovell-----	45	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Slow water movement Too acid	1.00 0.60 0.26 0.21
Porrett-----	40	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.26
141: Miesen-----	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
142: Miesen-----	45	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42
Ramsdell-----	40	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
143: Miesen, protected, drained-----	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42
144: Miesen, protected, drained-----	50	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Depth to saturated zone Flooding Too acid	0.86 0.60 0.42
Ramsdell, protected, drained	35	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding	1.00 0.77 0.60
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
155: Ramsdell-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.14
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Too acid	1.00 0.60 0.14
DeVoignes, protected, drained	30	Very limited Depth to saturated zone Slow water movement Flooding Too acid	1.00 1.00 0.60 0.21	Very limited Depth to saturated zone Too acid Flooding	1.00 1.00 0.60
158: DeVoignes-----	45	Very limited Ponding Flooding Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 1.00 0.21	Very limited Ponding Depth to saturated zone Too acid Flooding	1.00 1.00 1.00 1.00
Pywell-----	40	Very limited Ponding Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
200: Blinn, stony surface	80	Very limited Depth to bedrock Slow water movement Stone content Slope	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too acid Too steep for surface application Too steep for sprinkler irrigation Large stones on surface	1.00 1.00 1.00 1.00 0.01
201: Blinn, stony surface	80	Very limited Slope Depth to bedrock Slow water movement Stone content	1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00 0.01
202: Blinn, stony surface	55	Very limited Slope Depth to bedrock Slow water movement Stone content	1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00 0.01
Bobbitt, stony surface-----	30	Very limited Slope Depth to bedrock Stone content Slow water movement	1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
210: Agatha, stony surface-----	80	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.01	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 0.94
212: Agatha, stony surface-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.01	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.94
230: Lacy, stony surface	65	Very limited Depth to bedrock Stone content Slow water movement Slope	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too acid Large stones on surface Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Depth to bedrock Stone content Slow water movement	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Large stones on surface Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
232: Lacy, stony surface	55	Very limited Depth to bedrock Stone content Slow water movement Slope	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too acid Large stones on surface Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00 1.00
Bobbitt, stony surface-----	30	Very limited Depth to bedrock Stone content Slow water movement Slope	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too acid Large stones on surface Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00 1.00
233: Lacy, very stony surface-----	55	Very limited Slope Depth to bedrock Stone content Slow water movement	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Large stones on surface Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 1.00 1.00 1.00
Bobbitt, very stony surface-----	30	Very limited Slope Depth to bedrock Stone content Slow water movement Cobble content	1.00 1.00 1.00 1.00 0.45	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00 0.27

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250: Dorb, warm, stony surface-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock Cobble content	 1.00 1.00 1.00 1.00 0.61 0.32
255: Shayhill, stony surface-----	80	Very limited Slope Slow water movement Stone content Cobble content	 1.00 1.00 0.98 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00
256: Shayhill, stony surface-----	80	Very limited Slope Slow water movement Stone content Cobble content	 1.00 1.00 0.98 0.37	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00
257: Shayhill, dry, stony surface-----	80	Very limited Slope Slow water movement Cobble content	 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00
260: Seddow-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.02	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.84

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
261: Sly, dry-----	45	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Shayhill, dry-----	40	Very limited Slope Slow water movement Cobble content Stone content	1.00 1.00 0.97 0.49	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
262: Seddow-----	45	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.02	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.84
Sly, dry-----	40	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00
300: Taney-----	80	Very limited Depth to saturated zone Slow water movement Too acid Slope	1.00 1.00 0.14 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32
301: Taney-----	80	Very limited Slope Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 0.14	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 0.99 0.78
Benewah-----	40	Very limited Slope Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.21
304: Benewah-----	45	Very limited Slope Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.21
Santa-----	35	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
310: Santa-----	80	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
311: Santa-----	80	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00
314: Sharptop-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too acid Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 0.54
Santa-----	40	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
315: Setters-----	80	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation	1.00 1.00 0.96 0.67 0.22
316: Setters-----	50	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation	1.00 1.00 0.96 0.77 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Taney-----	30	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.14	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
320: Reggear-----	80	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
321: Reggear, moist-----	80	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
322: Reggear, moist-----	50	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
Sly-----	30	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
323: Bechtel-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.05
Reggear-----	35	Very limited Slope Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
325: Reggear-----	55	Very limited Depth to saturated zone Slow water movement Too acid Slope	1.00 1.00 0.21 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32
Sharptop, basalt substratum-----	30	Very limited Depth to bedrock Slow water movement Slope	1.00 1.00 1.00	Very limited Too acid Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation	1.00 1.00 0.71 0.22
326: Reggear-----	50	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
326: Seddow-----	35	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.02	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 0.84
330: Carlinton-----	50	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 0.99 0.78
Carlinton, dry-----	30	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.99
335: Carlinton, dry-----	80	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.99
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 0.99 0.32

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
336: Taney-----	25	Very limited Depth to saturated zone Slow water movement Too acid Slope	1.00 1.00 0.14 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.32
340: Arson-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock movement Stone content Cobble content	1.00 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00
341: Sinkler-----	45	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Arson-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.02
342: Sinkler, dry-----	45	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
342: Arson, dry-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.02
350: Southwick-----	80	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Somewhat limited Depth to saturated zone Too acid Too steep for surface application	0.97 0.55 0.32
351: Southwick-----	80	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to saturated zone Too acid	1.00 1.00 1.00 0.97 0.55
353: Tensed-----	50	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 0.92 0.32
Pedee-----	35	Very limited Slow water movement Depth to saturated zone Slope Too acid	1.00 1.00 1.00 0.03	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation	1.00 1.00 0.96 0.42 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
354: Tensed-----	50	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.92
Pedee-----	35	Very limited Slope Slow water movement Depth to saturated zone Too acid	1.00 1.00 1.00 0.03	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 0.96 0.42
355: Southwick-----	55	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Too steep for surface application Depth to saturated zone Too acid Too steep for sprinkler irrigation	1.00 0.97 0.55 0.50
Driscoll-----	30	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 0.88	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 0.96 0.92 0.67 0.06
356: Southwick-----	55	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to saturated zone Too acid	1.00 1.00 0.97 0.55

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
356: Driscoll-----	30	Very limited Slope Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 1.00 0.96 0.67
360: Larkin-----	80	Very limited Slow water movement Slope	1.00 0.88	Somewhat limited Too steep for surface application Too acid Too steep for sprinkler irrigation	0.92 0.55 0.06
361: Larkin-----	80	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 0.55
363: Larkin-----	55	Very limited Slow water movement Slope	1.00 0.50	Somewhat limited Too steep for surface application Too acid	0.68 0.55
Driscoll-----	30	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation	1.00 1.00 0.96 0.67 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
364: Larkin-----	50	Very limited Slow water movement Slope	1.00 0.88	Somewhat limited Too steep for surface application Too acid Too steep for sprinkler irrigation	0.92 0.55 0.06
Southwick-----	35	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Too steep for surface application Too acid	0.97 0.68 0.55
367: Larkin-----	55	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 0.55
Driscoll-----	30	Very limited Slope Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 0.96 0.67
400: Driscoll-----	80	Very limited Slope Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 0.96 0.67

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
405: Thatuna-----	45	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to saturated zone	1.00 1.00 0.93
Naff-----	40	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 1.00 0.26
406: Thatuna-----	50	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to saturated zone	1.00 1.00 0.93
Naff-----	40	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 1.00 0.26
410: Palouse-----	50	Very limited Slow water movement	1.00	Somewhat limited Too acid Slow water movement Too steep for surface application	0.77 0.26 0.08
Naff-----	35	Very limited Slow water movement Slope	1.00 0.13	Somewhat limited Too steep for surface application Slow water movement	0.32 0.26

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
411: Palouse-----	80	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Slow water movement	1.00 1.00 0.77 0.26
414: Naff-----	45	Very limited Slow water movement Slope	1.00 0.13	Somewhat limited Too steep for surface application Slow water movement	0.32 0.26
Thatuna-----	40	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.13	Somewhat limited Depth to saturated zone Too steep for surface application	0.93 0.32
415: Naff-----	50	Very limited Slow water movement Slope	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 0.78 0.26
Tilma-----	35	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Slow water movement Too steep for sprinkler irrigation Too acid	1.00 1.00 0.96 0.78 0.21
416: Naff-----	45	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 1.00 0.26

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Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
416: Thatuna-----	40	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to saturated zone	1.00 1.00 1.00 0.93
417: Naff-----	45	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 1.00 0.26
Palouse-----	40	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Slow water movement	1.00 1.00 0.77 0.26
420: Garfield-----	45	Very limited Slow water movement Slope	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 0.96 0.08
Tilma-----	35	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 0.50	Very limited Depth to saturated zone Slow water movement Too steep for surface application Too acid	1.00 0.96 0.68 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
421: Naff-----	55	Very limited Slow water movement Slope	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement	1.00 0.78 0.26
Garfield-----	30	Very limited Slow water movement Slope	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 0.96 0.08
500: Hobo-----	50	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
Threebear-----	35	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.42	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
501: Hobo, warm-----	45	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
501: Threebear, warm-----	40	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.42	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
510: Honeyjones-----	45	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Ahrs-----	35	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00
600: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
601: Ardenvoir-----	55	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
McCrosket-----	25	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.97	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.96
605: Benewah-----	45	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.21
Rasser-----	35	Very limited Slow water movement Slope Cobble content	1.00 1.00 0.15	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
606: Benewah-----	45	Very limited Slope Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
606: Rasser-----	40	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.15	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
610: Schumacher-----	80	Very limited Depth to bedrock Slow water movement Slope	1.00 1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 1.00 0.71
611: Schumacher-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
Tekoa-----	40	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.43	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 1.00
612: Libertybutte-----	45	Very limited Depth to bedrock Slow water movement Slope	1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.01
Tekoa-----	40	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.43	Very limited Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation	1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
613: Ardenvoir, dry-----	50	Very limited Depth to bedrock Slow water movement Slope Cobble content Stone content	 1.00 1.00 1.00 1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Depth to bedrock Slow water movement Slope Stone content Cobble content	 1.00 1.00 1.00 1.00 0.59	Very limited Depth to bedrock Too acid Too steep for surface application Large stones on surface Too steep for sprinkler irrigation	 1.00 1.00 1.00 1.00 1.00
614: Ardenvoir, dry-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	 1.00 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	 1.00 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	 1.00 1.00 1.00 1.00 1.00
617: Tekoa-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.43	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
621: Huckle-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
625: Huckle-----	45	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
650: Grangemont-----	80	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
651: Kingspeak-----	55	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
Shayhill, stony surface-----	30	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.98 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
652: Kingspeak-----	80	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
653: Kingspeak, cool-----	80	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
655: Tigley, moist-----	80	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00
656: Kingspeak, dry-----	80	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
660: Threebear-----	80	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 0.50 0.42	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.68
662: Threebear, warm-----	80	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.42	Very limited Depth to saturated zone Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
663: Threebear, warm-----	50	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 0.42	Very limited Depth to saturated zone Too acid Too steep for surface application	1.00 1.00 0.08
Porrett-----	35	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.42 0.26
665: Grangemont, warm----	80	Very limited Slow water movement Slope	1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
670: Honeyjones, warm----	80	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
671: Honeyjones-----	80	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
680: Ardenvoir-----	45	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.59	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 1.00 0.61

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
680: Huckle-----	40	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.95	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 0.71
681: Huckle-----	45	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.95	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 0.71
Ahrs-----	35	Very limited Slow water movement Cobble content Slope	1.00 1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00
700: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
701: Ardenvoir-----	55	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
McCrosket-----	25	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.97	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.96
703: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	1.00 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
704: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	1.00 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
705: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Rasser-----	30	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.15	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
706: Ardenvoir-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
707: Huckle, dry-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
Ardenvoir-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
710: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.97	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.96
Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.61
711: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.97	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.96
Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.61
712: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.97	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	 1.00 1.00 1.00 1.00 0.96
Tekoa-----	30	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.43	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
716: Ahrs-----	80	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
720: Huckle-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
721: Huckle-----	50	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
Ardenvoir-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
735: Lotuspoint, stony surface-----	80	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	1.00 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
736: Lotuspoint, stony surface-----	65	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	1.00 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	1.00 1.00 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
757: Hugus, warm-----	80	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
758: Tigley, moist-----	50	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Hugus-----	35	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
765: Saint Maries-----	45	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.99	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71
770: Pinecreek-----	80	Very limited Slope Slow water movement Cobble content Stone content	1.00 1.00 0.18 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
771: Honeyjones, warm----	80	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
772: Honeyjones, warm----	45	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Ahrs-----	35	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00

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Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
773: Honeyjones, dry-----	80	Very limited Slope Slow water movement Stone content Cobble content	 1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00
774: Pinecreek, moist----	80	Very limited Slope Slow water movement Cobble content Stone content	 1.00 1.00 0.18 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00
775: Pinecreek, moist----	80	Very limited Slope Slow water movement Cobble content Stone content	 1.00 1.00 0.18 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00
776: Cassyhill-----	80	Very limited Slope Depth to bedrock Slow water movement Cobble content	 1.00 1.00 1.00 0.01	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00
777: Bouldercreek, warm--	80	Very limited Slope Slow water movement Cobble content	 1.00 1.00 0.01	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 1.00 1.00

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Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
778: Cassychill-----	50	Very limited Depth to bedrock Slow water movement Slope Cobble content	1.00 1.00 1.00 0.01	Very limited Depth to bedrock Too acid Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00
Lotuspoint-----	35	Very limited Depth to bedrock Slow water movement Slope Stone content Cobble content	1.00 1.00 1.00 1.00 0.59	Very limited Depth to bedrock Too acid Too steep for surface application Large stones on surface Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00
779: Bouldercreek-----	80	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.53	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
780: Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Huckle-----	30	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.95	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.71

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Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
780: Saint Maries, dry----	30	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
781: Ahms, moist-----	45	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.86	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Cobble content	1.00 1.00 1.00 1.00 0.87
Honeyjones, warm----	35	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
782: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	1.00 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Cassyhill-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.01	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
784: Pinecreek, moist----	45	Very limited Slope Slow water movement Cobble content Stone content	1.00 1.00 0.18 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
784: Lotuspoint-----	35	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	 1.00 1.00 1.00 1.00 0.59	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Large stones on surface	 1.00 1.00 1.00 1.00 1.00
791: Latour-----	80	Very limited Slope Slow water movement Cobble content Stone content	 1.00 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Large stones on surface	 1.00 1.00 1.00 1.00 0.02
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slow water movement Slope	 1.00 1.00	Very limited Too acid Too steep for surface application Too steep for sprinkler irrigation	 1.00 1.00 1.00
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Flooding Depth to saturated zone Slow water movement	 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too acid	 1.00 1.00 0.21
Aquic Udifluvents---	40	Very limited Depth to saturated zone Slow water movement Cobble content Flooding	 1.00 1.00 0.86 0.60	Very limited Filtering capacity Depth to saturated zone Flooding Too acid	 1.00 0.99 0.60 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
902: Ahrs-----	80	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
903: Ahrs-----	50	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Pinecreek-----	30	Very limited Slope Slow water movement Cobble content Stone content	1.00 1.00 0.18 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
907: Honeyjones-----	80	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
908: Honeyjones-----	45	Very limited Slope Slow water movement Stone content Cobble content	1.00 1.00 0.92 0.42	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Ahrs-----	35	Very limited Slope Slow water movement Cobble content	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
913: Hobo-----	85	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 1.00
Ac1: Arson-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Carlinton-----	35	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00
Ac2: Arson, dry-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too acid Too steep for sprinkler irrigation Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Carlinton, dry-----	30	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 11.--Agricultural Disposal of Wastewater by Rapid Infiltration and Slow Rate Treatment--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Arson, dry-----	55	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock	1.00 1.00 1.00 1.00 0.61
Minaloosa, dry-----	20	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00
Rs2: Reggear, moist-----	40	Very limited Slope Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00
Stewah-----	25	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
116: Caldwell-----	LOAMY BOTTOM 16-24 PZ (R009XY402WA)	Favorable Normal Unfavorable	4,000 3,000 2,000	Basin wildrye Bluebunch wheatgrass Tufted hairgrass Clusterlilly Idaho fescue Sedge Small camas Lupine Redtop Mulesears wyethia Balsamroot Chrysactinia Cinquefoil Hawthorn Rose Sandberg bluegrass
118: Thatuna-----	COOL LOAMY 16-24 PZ (R009XY103WA)	Favorable Normal Unfavorable	1,500 1,300 1,100	Idaho fescue Bluebunch wheatgrass Common snowberry Low Oregonrape Pine reedgrass Rose sandberg bluegrass White spirea Balsamroot Basin wildrye Buckwheat Indian paintbrush Lomatium Phlox Prairiesmoke Saskatoon serviceberry Silky lupine Sticky geranium

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
118: Cald-----	WET MEADOW 16-24 PZ (R009XY601WA)		Lb/acre	
		Favorable	7,500	Tufted hairgrass
		Normal	6,000	Rush
		Unfavorable	4,000	Sedge
				Reed canarygrass
				Black hawthorn
				Idaho fescue
				Redtop
				Willow
				Cinquefoil
				Redosier dogwood
				Basin wildrye
				Black cottonwood
				Canada bluegrass
				Common snowberry
				Douglas spirea
				Goldenrod
				Quaking aspen
				Rose
				Saskatoon serviceberry
				Thinleaf alder
120: Latahco-----	DRY MEADOW (R009XY019ID)			
		Favorable	2,000	Nevada bluegrass
		Normal	1,300	Alpine timothy
		Unfavorable	850	Basin wildrye
				Meadow barley
				Sandberg bluegrass
				Sedge
				Aster
				Clover
				Common yarrow
				Cinquefoil
				Rush
				Slender wheatgrass
				Wildiris
				Willow
				Rose

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
121: Latahco-----	DRY MEADOW (R009XY019ID)		Lb/acre		
		Favorable	2,000		Nevada bluegrass
		Normal	1,300		Alpine timothy
		Unfavorable	850		Basin wildrye
					Meadow barley
					Sandberg bluegrass
					Sedge
					Aster
					Clover
					Common yarrow
					Cinquefoil
					Rush
					Slender wheatgrass
Lovell-----	MEADOW (R009XY018ID)				Wildiris
					Willow
					Rose
		Favorable	4,500		Tufted hairgrass
		Normal	3,500		Nebraska sedge
		Unfavorable	2,500		Alpine timothy
					Bulrush
					Cinquefoil
					Clover
					Curled dock
					Lambstongue ragwort
					Meadow barley
					Northern water plantain
					Prairiesmoke
					Rush
					Slender wheatgrass
					Western aster
					Willow

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
122: Tilma-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre	
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
Latah-----	WET MEADOW 16-24 PZ (R009XY601WA)			Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea
		Favorable	7,500	Tufted hairgrass
		Normal	6,000	Reed canarygrass
		Unfavorable	4,000	Rush
				Sedge
				Black hawthorn
				Idaho fescue
				Redtop
				Willow
				Basin wildrye
				Cinquefoil
				Goldenrod
				Redosier dogwood
				Rose
				Saskatoon serviceberry
				Alder
				Black cottonwood
				Canada bluegrass
				Quaking aspen

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
124: Caldwell-----	LOAMY BOTTOM 16-24 PZ (R009XY402WA)	Favorable Normal Unfavorable	4,000 3,000 2,000	Lb/acre Basin wildrye Bluebunch wheatgrass Tufted hairgrass Clusterlilly Idaho fescue Sedge Small camas Lupine Redtop Mulsears wyethia Balsamroot Chrysactinia Cinquefoil Hawthorn Rose Sandberg bluegrass
Cald-----	WET MEADOW 16-24 PZ (R009XY601WA)	Favorable Normal Unfavorable	7,500 6,000 4,000	Tufted hairgrass Rush Sedge Reed canarygrass Black hawthorn Idaho fescue Redtop Willow Cinquefoil Redosier dogwood Basin wildrye Black cottonwood Canada bluegrass Common snowberry Douglas spirea Goldenrod Quaking aspen Rose Saskatoon serviceberry Thinleaf alder

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
125: Lovell-----	MEADOW (R009XY018TD)		Lb/acre		
		Favorable	4,500		Tufted hairgrass
		Normal	3,500		Nebraska sedge
		Unfavorable	2,500		Alpine timothy
					Bulrush
					Cinquefoil
					Clover
					Curled dock
					Lambstongue ragwort
					Meadow barley
					Northern water plantain
					Prairiesmoke
Porrett-----	MEADOW (R009XY018TD)				Rush
					Slender wheatgrass
					Western aster
					Willow
		Favorable	4,500		Tufted hairgrass
		Normal	3,500		Nebraska sedge
		Unfavorable	2,500		Alpine timothy
					Bulrush
					Cinquefoil
					Clover
					Curled dock
Aquandic Endoaquepts--	Western redcedar/queencup beadlily (CN530)				Lambstongue ragwort
					Meadow barley
					Northern water plantain
					Prairiesmoke
					Rush
					Slender wheatgrass
					Western aster
					Willow
		Favorable	---		Black hawthorn
		Normal	---		Rocky Mountain maple
		Unfavorable	---		Scouler willow
					Sitka alder
					Forbs
					Perennial grasses
					Longtube twinflower
					Other shrubs
					Pyrola
					Thimbleberry
					Carex
					Wild ginger

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
130: Porrett-----	MEADOW (R009XY018TD)		Lb/acre		
		Favorable	4,500		Tufted hairgrass
		Normal	3,500		Nebraska sedge
		Unfavorable	2,500		Alpine timothy
					Bulrush
					Cinquefoil
					Clover
					Curled dock
					Lambstongue ragwort
					Meadow barley
					Northern water plantain
					Prairiesmoke
					Rush
					Slender wheatgrass
					Western aster
					Willow
136: Lovell-----	MEADOW (R009XY018TD)				
		Favorable	4,500		Tufted hairgrass
		Normal	3,500		Nebraska sedge
		Unfavorable	2,500		Alpine timothy
					Bulrush
					Cinquefoil
					Clover
					Curled dock
					Lambstongue ragwort
					Meadow barley
					Northern water plantain
					Prairiesmoke
					Rush
					Slender wheatgrass
					Western aster
					Willow

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
136: Porrett-----	MEADOW (R009XY018ID)		Lb/acre	
		Favorable	4,500	Tufted hairgrass
		Normal	3,500	Nebraska sedge
		Unfavorable	2,500	Alpine timothy
				Bulrush
				Cinquefoil
				Clover
				Curled dock
				Lambstongue ragwort
				Meadow barley
				Northern water plantain
				Prairiesmoke
				Rush
				Slender wheatgrass
				Western aster
				Willow
141: Miesen.				
142: Miesen.				
Ramsdell.				
143: Miesen, protected, drained.				
144: Miesen, protected, drained.				
Ramsdell, protected, drained.				
145: Bellslake, protected, drained.				
150: Pywell, protected, drained.				

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
155: Ramsdell.			Lb/acre	
156: Ramsdell, protected, drained.				
157: Ramsdell, protected, drained.				
DeVoignes, protected, drained.				
158: DeVoignes.				
Pywell.				
200: Blinn, stony surface--	Grand fir/ninebark (CN506)	Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Elk sedge
				Myrtle pachistima
				Sweet-scented bedstraw
				Western meadow-rue
201: Blinn, stony surface--	Grand fir/ninebark (CN506)	Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Elk sedge
				Myrtle pachistima
				Sweet-scented bedstraw
				Western meadow-rue
202: Blinn, stony surface--	Grand fir/ninebark (CN506)	Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Elk sedge
				Myrtle pachistima
				Sweet-scented bedstraw
				Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
202: Bobbitt, stony surface	Douglas-fir/ninebark (CN260)		Lb/acre		
		Favorable	---	Bluebunch wheatgrass	
		Normal	---	Common snowberry	
		Unfavorable	---	Creambush oceanspray	
				Mallow ninebark	
				Pinegrass	
				Baldhip rose	
				Elk sedge	
				Heartleaf arnica	
				Idaho fescue	
				Spreading dogbane	
				Strawberry	
				White spirea	
210: Agatha, stony surface	Grand fir/ninebark (CN506)	Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Brome	
				Common snowberry	
				Idaho fescue	
				Idaho goldthread	
				Rocky Mountain maple	
				Rose	
				Smallflower miterwort	
				Starry false Solomon's s	
				Sweet-scented bedstraw	
				Western meadow-rue	
				White spirea	
212: Agatha, stony surface	Grand fir/ninebark (CN506)	Favorable	---	Mallow ninebark	
		Normal	---	Brome	
		Unfavorable	---	Common snowberry	
				Idaho fescue	
				Idaho goldthread	
				Rocky Mountain maple	
				Rose	
				Smallflower miterwort	
				Starry false Solomon's s	
				Sweet-scented bedstraw	
				Western meadow-rue	
				White spirea	

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight	Lb/acre	
230: Lacy, stony surface---	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	1,100 900 800	Idaho fescue Common snowberry Bluebunch wheatgrass Arrowleaf balsamroot Cheatgrass Common yarrow Lupine White spirea Woods' rose	
Rock outcrop.					
231: Lacy, very stony surface-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Idaho fescue Common snowberry Bluebunch wheatgrass Arrowleaf balsamroot Cheatgrass Common yarrow Lupine White spirea Woods' rose	
Rock outcrop.					
232: Lacy, stony surface---	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Idaho fescue Common snowberry Bluebunch wheatgrass Arrowleaf balsamroot Cheatgrass Common yarrow Lupine White spirea Woods' rose	

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
232: Bobbitt, stony surface	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Lb/acre	Bluebunch wheatgrass Common snowberry Creambush oceanspray Mallow ninebark Pinegrass Baldhip rose Elk sedge Heartleaf arnica Idaho fescue Spreading dogbane Strawberry White spirea
233: Lacy, very stony surface-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	1,100 900 800		Idaho fescue Common snowberry Bluebunch wheatgrass Arrowleaf balsamroot Cheatgrass Common yarrow Lupine White spirea Woods' rose
Bobbitt, very stony surface-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---		Bluebunch wheatgrass Common snowberry Creambush oceanspray Mallow ninebark Pinegrass Baldhip rose Elk sedge Heartleaf arnica Idaho fescue Spreading dogbane Strawberry White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegetation
		Kind of year	Dry Weight		
250: Dorb, warm, stony surface-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---	Lb/acre	Creambush oceanspray Mallow ninebark Rocky Mountain maple American trailplant Boxleaf myrtle Colombia brome Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Oneleaf foamflower Queencup bead lily Rose Spiraea Starry false Solomon's seal Sweet-scented bedstraw
255: Shayhill, stony surface-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---		Creambush oceanspray Baldhip rose Big huckleberry False lily of the valley Idaho goldthread Longtube twinflower Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Ross' sedge Sweet-scented bedstraw Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegetation
		Kind of year	Dry Weight	
256: Shayhill, stony surface-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Baldhip rose Big huckleberry False lily of the valley Idaho goldthread Longtube twinflower Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Ross' sedge Sweet-scented bedstraw Western meadow-rue
257: Shayhill, dry, stony surface-----	Grand fir/queencup beadlily (CN520)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Baldhip rose Big huckleberry Columbia brome Elk sedge Idaho goldthread Longtube twinflower Pinegrass Queencup bead lily Rocky Mountain maple Starry false Solomon's seal Sweet-scented bedstraw Thimbleberry White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
260: Seddow-----	Grand fir/twinflower (CN590)	Favorable Normal Unfavorable	--- --- ---	Lb/acre Creambush oceanspray Mallow ninebark Longtube twinflower White spirea Brome Common snowberry Elk sedge False Solomon's seal Idaho goldthread Pinegrass Rocky Mountain maple Rose Strawberry Western meadow-rue
261: Sly, dry-----	Grand fir/queencup beادلily (CN520)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Mallow ninebark Myrtle boxwood White spirea Common snowberry False Solomon's seal Goldthread Longtube twinflower Oneleaf foamflower Pinegrass Queencup bead lily Rattlesnake plantain Rocky Mountain maple Smallflower miterwort Violet Western thimbleberry

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
261: Shayhill, dry-----	Grand fir/queencup beادلily (CN520)	Favorable Normal Unfavorable	---	Lb/acre	Creambush oceanspray Mallow ninebark Myrtle boxwood Big huckleberry Common snowberry Idaho goldthread Longtube twinflower Oneleaf foamflower Pinegrass Queencup bead lily Rose Smallflower miterwort Sweet-scented bedstraw Violet Western rattlesnake plan Western thimbleberry White spirea
262: Seddow-----	Grand fir/twinflower (CN590)	Favorable Normal Unfavorable	---	---	Creambush oceanspray Mallow ninebark Longtube twinflower White spirea Brome Common snowberry Elk sedge False Solomon's seal Idaho goldthread Pinegrass Rocky Mountain maple Rose Strawberry Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
262: sly, dry-----	Grand fir/queencup beadlily (CN520)		Lb/acre	
		Favorable	---	Creambush oceanspray
		Normal	---	Mallow ninebark
		Unfavorable	---	Myrtle boxwood
				White spirea
				Common snowberry
				False Solomon's seal
				Goldthread
				Longtube twinflower
				Oneleaf foamflower
				Pinegrass
				Queencup bead lily
				Rattlesnake plantain
				Rocky Mountain maple
				Smallflower miterwort
				Violet
				Western thimbleberry
300: Taney-----	Douglas-fir/ninebark (CN260)		---	Mallow ninebark
		Favorable	---	Common snowberry
		Normal	---	Oceanspray
		Unfavorable	---	Saskatoon serviceberry
				White spirea
				Columbia brome
				Pinegrass
				Strawberry
				Woods' rose
301: Taney-----	Douglas-fir/ninebark (CN260)		---	Mallow ninebark
		Favorable	---	Common snowberry
		Normal	---	Oceanspray
		Unfavorable	---	Saskatoon serviceberry
				White spirea
				Columbia brome
				Pinegrass
				Strawberry
				Woods' rose

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
303: Carlinton-----	Grand fir/ninebark (CN506)		Lb/acre	
		Favorable	---	Mallow ninebark
		Normal	---	Oceanspray
		Unfavorable	---	Common snowberry
				Saskatoon serviceberry
				White spirea
				Baldhip rose
				Elk sedge
				Idaho fescue
				Sweet-scented bedstraw
Benewah-----	Grand fir/ninebark (CN506)	Favorable	---	Mallow ninebark
		Normal	---	Oceanspray
		Unfavorable	---	Baldhip rose
				Common snowberry
				Heartleaf arnica
				Idaho goldthread
				Oregon fairybells
				Pinegrass
				Saskatoon serviceberry
				Sweet-scented bedstraw
304: Benewah-----	Grand fir/ninebark (CN506)			Western meadow-rue
				White spirea
		Favorable	---	Mallow ninebark
		Normal	---	Oceanspray
		Unfavorable	---	Baldhip rose
				Common snowberry
				Heartleaf arnica
				Idaho goldthread
				Oregon fairybells
				Pinegrass
				Saskatoon serviceberry
				Sweet-scented bedstraw
				Western meadow-rue
				White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
304: Santa-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Common snowberry Saskatoon serviceberry Arnica Idaho goldthread Piper's anemone Rose Sweetcicely White spirea
310: Santa-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Common snowberry Saskatoon serviceberry Arnica Idaho goldthread Piper's anemone Rose Sweetcicely White spirea
311: Santa-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Common snowberry Saskatoon serviceberry Arnica Idaho goldthread Piper's anemone Rose Sweetcicely White spirea
314: Sharptop-----	Grand fir/twinflower (CN590)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Elk sedge Idaho fescue Longtube twinflower Pinegrass Sweet-scented bedstraw White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
320: Reggear-----	Grand fir/queencup beادلily (CN520)		Lb/acre	
		Favorable	---	Oceanspray
		Normal	---	Baldhip rose
		Unfavorable	---	Common snowberry
				Longtube twinflower
				Mallow ninebark
				Queencup bead lily
				Ross' sedge
321: Reggear, moist-----	Western redcedar/queencup beادلily (CN530)			Starry false Solomon's s
				Western meadow-rue
		Favorable	---	
		Normal	---	Baldhip rose
		Unfavorable	---	Idaho goldthread
				Longtube twinflower
				Myrtle pachistima
				Pacific trillium
322: Reggear, moist-----	Western redcedar/queencup beادلily (CN530)			Pathfinder
				Queencup bead lily
				Rocky Mountain maple
				Starry false Solomon's s
				Sweet-scented bedstraw
				Sweetcicely
				Western meadow-rue
				Western rattlesnake plan
		Favorable	---	Myrtle boxwood
		Normal	---	Rocky Mountain maple
		Unfavorable	---	Saskatoon serviceberry
				White spirea
				Creambush oceanspray
				False Solomon's seal
				Idaho goldthread
				Longtube twinflower
		Pacific trillium		
		Queencup beادلily		
		Rattlesnake plantain		
		Rose		
		Sweet-scented bedstraw		
		Sweetcicely		
		Trailplant		
		Western meadow-rue		

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegetation
		Kind of year	Dry Weight		
322: Sly-----	Western redcedar/queencup beadlily (CN530)			Lb/acre	
		Favorable	---		Creambush oceanspray
		Normal	---		Myrtle boxwood
		Unfavorable	---		Rocky Mountain maple
					White spirea
					American trailplant
					False Solomon's seal
					Goldthread
					Longtube twinflower
					Mallow ninebark
					Oneleaf foamflower
					Pacific trillium
					Queencup bead lily
					Rose
					Smallflower miterwort
			Sweet-scented bedstraw		
			Western thimbleberry		
323: Bechtel-----	Grand fir/queencup beadlily (CN520)	Favorable	---		Oceanspray
		Normal	---		Common snowberry
		Unfavorable	---		Elk sedge
					Longtube twinflower
					Mallow ninebark
					Oregon fairybells
					Piper's anemone
					Queencup bead lily
					Rose
					Saskatoon serviceberry
					Strawberry
					False lily of the valley
					Heartleaf arnica
					Oneleaf foamflower
					Western meadow-rue
Reggear-----	Grand fir/queencup beadlily (CN520)	Favorable	---		Oceanspray
		Normal	---		Baldhip rose
		Unfavorable	---		Common snowberry
					Longtube twinflower
					Mallow ninebark
					Queencup bead lily
					Ross' sedge
					Starry false Solomon's s
			Western meadow-rue		

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegetation
		Kind of year	Dry Weight		
325: Reggear-----	Grand fir/queencup beadlily (CN520)			Lb/acre	
		Favorable	---		Oceanspray
		Normal	---		Baldhip rose
		Unfavorable	---		Common snowberry
					Longtube twinflower
					Mallow ninebark
					Queencup bead lily
					Ross' sedge
					Starry false Solomon's seal
					Western meadow-rue
Sharptop, basalt substratum-----	Grand fir/twinflower (CN590)	Favorable	---		Common snowberry
		Normal	---		Mallow ninebark
		Unfavorable	---		Oceanspray
					Saskatoon serviceberry
					Elk sedge
					Longtube twinflower
					Pinegrass
					Western meadow-rue
326: Reggear-----	Grand fir/queencup beadlily (CN520)	Favorable	---		Oceanspray
		Normal	---		Baldhip rose
		Unfavorable	---		Common snowberry
					Longtube twinflower
					Mallow ninebark
					Queencup bead lily
					Ross' sedge
					Starry false Solomon's seal
					Western meadow-rue
Seddwow-----	Grand fir/twinflower (CN590)	Favorable	---		Creambush oceanspray
		Normal	---		Mallow ninebark
		Unfavorable	---		Longtube twinflower
					White spirea
					Brome
					Common snowberry
					Elk sedge
					False Solomon's seal
					Idaho goldthread
					Pinegrass
					Rocky Mountain maple
					Rose
					Strawberry
					Western meadow-rue

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
330: Carlinton-----	Grand fir/ninebark (CN506)		Lb/acre		
		Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Common snowberry	
				Saskatoon serviceberry	
				White spirea	
				Baldhip rose	
				Elk sedge	
				Idaho fescue	
		Sweet-scented bedstraw			
Carlinton, dry-----	Douglas-fir/ninebark (CN260)	Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Common snowberry	
				Saskatoon serviceberry	
				White spirea	
				Baldhip rose	
				Columbia brome	
335: Carlinton, dry-----	Douglas-fir/ninebark (CN260)	Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Common snowberry	
				Saskatoon serviceberry	
				White spirea	
				Baldhip rose	
				Columbia brome	
336: Carlinton, dry-----	Douglas-fir/ninebark (CN260)	Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Common snowberry	
				Saskatoon serviceberry	
				White spirea	
				Baldhip rose	
				Columbia brome	
Taney-----	Douglas-fir/ninebark (CN260)	Favorable	---	Mallow ninebark	
		Normal	---	Common snowberry	
		Unfavorable	---	Oceanspray	
				Saskatoon serviceberry	
				White spirea	
				Baldhip rose	
				Columbia brome	
		Saskatoon serviceberry			
		White spirea			
		Columbia brome			
		Pinegrass			
		Strawberry			
		Woods' rose			

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
340: Arson-----	Grand fir/ninebark (CN506)		Lb/acre	
		Favorable	---	Mallow ninebark
		Normal	---	Oceanspray
		Unfavorable	---	Saskatoon serviceberry
				Scouler's willow
				Common snowberry
				Lewis' mockorange
				Rose
				White spirea
				Columbia brome
Lotuspoint-----	Douglas-fir/ninebark (CN260)			Pathfinder
				Strawberry
				Elk sedge
				Pinegrass
				Sweet-scented bedstraw
		Favorable	---	Oceanspray
		Normal	---	Common snowberry
		Unfavorable	---	Elk sedge
				Mallow ninebark
				Baldhip rose
341: Sinkler-----	Grand fir/ninebark (CN506)			Bluebunch wheatgrass
				Idaho fescue
				Pinegrass
				Saskatoon serviceberry
				White spirea
		Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Saskatoon serviceberry
				Baldhip rose
				Idaho fescue
				Low Oregonrape
				Pinegrass
				Scouler's willow
				Sweet-scented bedstraw

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
341: Arson-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Lb/acre	Mallow ninebark Oceanspray Saskatoon serviceberry Scouler's willow Common snowberry Lewis' mockorange Rose White spirea Columbia brome Pathfinder Strawberry Elk sedge Pinegrass Sweet-scented bedstraw
342: Sinkler, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---		Common snowberry Mallow ninebark Oceanspray Idaho fescue Low Oregonrape Rose Smallflower miterwort Strawberry Columbia brome Common yarrow
Arson, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---		Mallow ninebark Oceanspray Saskatoon serviceberry Common snowberry Lewis' mockorange Low Oregonrape Rose Columbia brome Strawberry Common yarrow Oneleaf foamflower Sweet-scented bedstraw

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
350: Southwick-----	Ponderosa pine/ninebark (CN190)	Favorable Normal Unfavorable	--- --- ---	Lb/acre	Mallow ninebark Common snowberry Oceanspray White spirea Columbia brome Oregongrape Pine reedgrass Rose Strawberry
351: Southwick-----	Ponderosa pine/ninebark (CN190)	Favorable Normal Unfavorable	--- --- ---		Mallow ninebark Common snowberry Oceanspray White spirea Columbia brome Oregongrape Pine reedgrass Rose Strawberry
353: Tensed-----	Douglas-fir/common snowberry (CN310)	Favorable Normal Unfavorable	--- --- ---		Common snowberry Other perennial forbs Creambush oceanspray Mallow ninebark Other perennial grasses Rose Bluebunch wheatgrass Pinegrass Sweetscented bedstraw White spirea Vetch Elk sedge

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
353: Pedee-----	Douglas-fir/ninebark (CN260)			Lb/acre	
		Favorable	---		Common snowberry
		Normal	---		Mallow ninebark
		Unfavorable	---		Other perennial forbs
					Creambush oceanspray
					Other perennial grasses
					White spirea
					Bluebunch wheatgrass
					Pinegrass
					Rose
					Sweetscented bedstraw
					Vetch
					Elk sedge
354: Tensed-----	Douglas-fir/common snowberry (CN310)	Favorable	---		Common snowberry
		Normal	---		Other perennial forbs
		Unfavorable	---		Creambush oceanspray
					Mallow ninebark
					Other perennial grasses
					Rose
					Bluebunch wheatgrass
					Pinegrass
					Sweetscented bedstraw
					White spirea
					Vetch
					Elk sedge
Pedee-----	Douglas-fir/ninebark (CN260)	Favorable	---		Common snowberry
		Normal	---		Mallow ninebark
		Unfavorable	---		Other perennial forbs
					Creambush oceanspray
					Other perennial grasses
					White spirea
					Bluebunch wheatgrass
					Pinegrass
					Rose
					Sweetscented bedstraw
					Vetch
					Elk sedge

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
355: Southwick-----	Ponderosa pine/ninebark (CNI90)		Lb/acre	
		Favorable	---	Mallow ninebark
		Normal	---	Common snowberry
		Unfavorable	---	Oceanspray
				White spirea
				Columbia brome
				Oregongrape
				Pine reedgrass
				Rose
				Strawberry
Driscoll-----	Ponderosa pine/common snowberry (CNI70)	Favorable	---	Common snowberry
		Normal	---	Pinegrass
		Unfavorable	---	Arrowleaf balsamroot
				Bluebunch wheatgrass
				Columbia brome
				Elk sedge
				Idaho fescue
				Low Oregongrape
				Other perennial forbs
				White spirea
356: Southwick-----	Ponderosa pine/ninebark (CNI90)	Favorable	---	Mallow ninebark
		Normal	---	Common snowberry
		Unfavorable	---	Oceanspray
				White spirea
				Columbia brome
				Oregongrape
				Pine reedgrass
				Rose
				Strawberry
		Driscoll-----	Ponderosa pine/common snowberry (CNI70)	Favorable
Normal	---			Pinegrass
Unfavorable	---			Arrowleaf balsamroot
				Bluebunch wheatgrass
				Columbia brome
				Elk sedge
				Idaho fescue
				Low Oregongrape
				Other perennial forbs
				White spirea
		Woods' rose		

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
360: Larkin-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Lb/acre Common snowberry White spirea Columbia brome Woods' rose	
361: Larkin-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Common snowberry White spirea Columbia brome Woods' rose	
363: Larkin-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Common snowberry White spirea Columbia brome Woods' rose	
Driscoll-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Pinegrass Arrowleaf balsamroot Bluebunch wheatgrass Columbia brome Elk sedge Idaho fescue Low Oregongrape Other perennial forbs White spirea Woods' rose	
364: Larkin-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Common snowberry White spirea Columbia brome Woods' rose	
Southwick-----	Ponderosa pine/ninebark (CN190)	Favorable Normal Unfavorable	--- --- ---	Mallo ninebark Common snowberry Oceanspray White spirea Columbia brome Oregongrape Pine reedgrass Rose Strawberry	

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
367: Larkin-----	Ponderosa pine/common snowberry (CN170)	Favorable	---	Common snowberry
		Normal	---	White spirea
		Unfavorable	---	Columbia brome Woods' rose
Driscoll-----	Ponderosa pine/common snowberry (CN170)	Favorable	---	Common snowberry
		Normal	---	Pinegrass
		Unfavorable	---	Arrowleaf balsamroot Bluebunch wheatgrass Columbia brome Elk sedge Idaho fescue Low Oregongrape Other perennial forbs White spirea Woods' rose
400: Driscoll-----	Ponderosa pine/common snowberry (CN170)	Favorable	---	Common snowberry
		Normal	---	Pinegrass
		Unfavorable	---	Arrowleaf balsamroot Bluebunch wheatgrass Columbia brome Elk sedge Idaho fescue Low Oregongrape Other perennial forbs White spirea Woods' rose

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
405: Thatuna-----	COOL LOAMY 16-24 PZ (R009XY103WA)		Lb/acre	
		Favorable	1,500	Idaho fescue
		Normal	1,300	Bluebunch wheatgrass
		Unfavorable	1,100	Common snowberry
				Low Oregonrape
				Pine reedgrass
				Rose
				Sandberg bluegrass
				White spirea
				Balsamroot
				Basin wildrye
				Buckwheat
				Indian paintbrush
				Lomatium
Naff-----	LOAMY 16-24 PZ (R009XY102WA)			Phlox
				Prairiesmoke
				Saskatoon serviceberry
				Silky lupine
				Sticky geranium
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
406: Thatuna-----	COOL LOAMY 16-24 PZ (R009XY103WA)		Lb/acre	
		Favorable	1,500	Idaho fescue
		Normal	1,300	Bluebunch wheatgrass
		Unfavorable	1,100	Common snowberry
				Low Oregongrape
				Pine reedgrass
				Rose
				Sandberg bluegrass
				White spirea
				Balsamroot
				Basin wildrye
				Buckwheat
				Indian paintbrush
				Lomatium
Naff-----	LOAMY 16-24 PZ (R009XY102WA)			Phlox
				Prairiesmoke
				Saskatoon serviceberry
				Silky lupine
				Sticky geranium
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry	Weight	
410: Palouse-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre		
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Balsamroot
					Milkvetch
					Basin wildrye
					Biscuitroot
					Hawthorn
					Lupine
					Needlegrass
					Phlox
					Rose
					Rough fescue
Naff-----	LOAMY 16-24 PZ (R009XY102WA)				Sandberg bluegrass
					Saskatoon serviceberry
					Spirea
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Sandberg bluegrass
					Balsamroot
					Basin wildrye
					Biscuitroot
					Green rabbitbrush
					Hawthorn
					Lupine
					Milkvetch
					Needlegrass
					Phlox
					Rose
					Rough fescue
					Saskatoon serviceberry
					Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry	Weight	
411: Palouse-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre		
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Balsamroot
					Milkvetch
					Basin wildrye
					Biscuitroot
					Hawthorn
					Lupine
					Needlegrass
					Phlox
					Rose
					Rough fescue
414: Naff-----	LOAMY 16-24 PZ (R009XY102WA)				Sandberg bluegrass
					Saskatoon serviceberry
					Spirea
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Sandberg bluegrass
					Balsamroot
					Basin wildrye
					Biscuitroot
					Green rabbitbrush
					Hawthorn
					Lupine
					Milkvetch
					Needlegrass
					Phlox
					Rose
					Rough fescue
					Saskatoon serviceberry
					Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
414: Thatuna-----	COOL LOAMY 16-24 PZ (R009XY103WA)		Lb/acre	
		Favorable	1,500	Idaho fescue
		Normal	1,300	Bluebunch wheatgrass
		Unfavorable	1,100	Common snowberry
				Low Oregongrape
				Pine reedgrass
				Rose
				Sandberg bluegrass
				White spirea
				Balsamroot
				Basin wildrye
				Buckwheat
				Indian paintbrush
				Lomatium
				Phlox
				Prairiesmoke
				Saskatoon serviceberry
				Silky lupine
				Sticky geranium
415: Naff-----	LOAMY 16-24 PZ (R009XY102WA)			
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
415: Tilma-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre	
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea
416: Naff-----	LOAMY 16-24 PZ (R009XY102WA)			
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
416: Thatuna-----	COOL LOAMY 16-24 PZ (R009XY103WA)		Lb/acre	
		Favorable	1,500	Idaho fescue
		Normal	1,300	Bluebunch wheatgrass
		Unfavorable	1,100	Common snowberry
				Low Oregongrape
				Pine reedgrass
				Rose
				Sandberg bluegrass
				White spirea
				Balsamroot
				Basin wildrye
				Buckwheat
				Indian paintbrush
				Lomatium
				Phlox
				Prairiesmoke
				Saskatoon serviceberry
				Silky lupine
				Sticky geranium
417: Naff-----	LOAMY 16-24 PZ (R009XY102WA)			
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry	Weight	
417: Palouse-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre		
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Balsamroot
					Milkvetch
					Basin wildrye
					Biscuitroot
					Hawthorn
					Lupine
					Needlegrass
					Phlox
					Rose
					Rough fescue
420: Garfield-----	LOAMY 16-24 PZ (R009XY102WA)				Sandberg bluegrass
					Saskatoon serviceberry
					Spirea
		Favorable	1,500		Bluebunch wheatgrass
		Normal	1,300		Idaho fescue
		Unfavorable	1,100		Balsamroot
					Basin wildrye
					Biscuitroot
					Green rabbitbrush
					Hawthorn
					Lupine
					Milkvetch
					Needlegrass
					Phlox
					Rose
					Rough fescue
					Sandberg bluegrass
					Saskatoon serviceberry
					Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
420: Tilma-----	LOAMY 16-24 PZ (R009XY102WA)		Lb/acre	
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
421: Naff-----	LOAMY 16-24 PZ (R009XY102WA)			Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea
		Favorable	1,500	Bluebunch wheatgrass
		Normal	1,300	Idaho fescue
		Unfavorable	1,100	Sandberg bluegrass
				Balsamroot
				Basin wildrye
				Biscuitroot
				Green rabbitbrush
				Hawthorn
				Lupine
				Milkvetch
				Needlegrass
				Phlox
				Rose
				Rough fescue
				Saskatoon serviceberry
				Spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
421: Garfield-----	LOAMY 16-24 PZ (R009XY102WA)	Favorable Normal Unfavorable	Lb/acre 1,500 1,300 1,100	Bluebunch wheatgrass Idaho fescue Balsamroot Basin wildrye Biscuitroot Green rabbitbrush Hawthorn Lupine Milkvetch Needlegrass Phlox Rose Rough fescue Sandberg bluegrass Saskatoon serviceberry Spirea
500: Hobo-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Thinleaf alder Baldhip rose Common snowberry Idaho goldthread Longtube twinflower Myrtle pachistima Pacific trillium Pathfinder Queencup bead lily Rocky Mountain maple Starry false Solomon's s Sweet-scented bedstraw Sweetcicely Western meadow-rue Western rattlesnake plan Western thimbleberry

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
500: Threebear-----	Western hemlock/queencup beadlily (CN570)		Lb/acre	
		Favorable	---	Creambush oceanspray
		Normal	---	Myrtle pachistima
		Unfavorable	---	Baldhip rose
				Idaho goldthread
				Longtube twinflower
				Oneleaf foamflower
				Oregon fairybells
				Prince's pine
				Queencup bead lily
				Spirea
				Starry false Solomon's s
				Sweet-scented bedstraw
		Western rattlesnake plan		
501: Hobo, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable	---	Baldhip rose
		Normal	---	Idaho goldthread
		Unfavorable	---	Longtube twinflower
				Myrtle pachistima
				Pacific trillium
				Pathfinder
				Queencup bead lily
				Rocky Mountain maple
				Starry false Solomon's s
				Sweet-scented bedstraw
				Sweetcicely
				Western meadow-rue
				Western rattlesnake plan
Threebear, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable	---	Creambush oceanspray
		Normal	---	Baldhip rose
		Unfavorable	---	Columbia brome
				Elk sedge
				Idaho goldthread
				Longtube twinflower
				Myrtle pachistima
				Pathfinder
				Prince's pine
				Queencup bead lily
				Rocky Mountain maple
				Spirea
				Starry false Solomon's s
				Sweet-scented bedstraw
				Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
510: Honeyjones-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Rocky Mountain maple Saskatoon serviceberry Thinleaf huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beadlily Western rattlesnake plantain
Ahrs-----	Grand fir/queencup beadlily (CN520)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Baldhip rose Big huckleberry Common snowberry Elk sedge Idaho goldthread Longtube twinflower Mallow ninebark Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's seal Utah honeysuckle Western meadow-rue
600: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's seal Sweet-scented bedstraw Western meadow-rue

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
600: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---	---	Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan
601: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	---	---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
McCrosket-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	---	---	Oceanspray Common snowberry Mallow ninebark Common yarrow Pinegrass Rose Strawberry Thimbleberry White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
605: Benewah-----	Grand fir/ninebark (CN506)		Lb/acre		
		Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Baldhip rose	
				Common snowberry	
				Heartleaf arnica	
				Idaho goldthread	
				Oregon fairybells	
				Pinegrass	
				Saskatoon serviceberry	
				Sweet-scented bedstraw	
				Western meadow-rue	
				White spirea	
Rasser-----	Grand fir/ninebark (CN506)	Favorable	---	Mallow ninebark	
		Normal	---	Oceanspray	
		Unfavorable	---	Columbia brome	
				Common snowberry	
				Heartleaf arnica	
				Honeysuckle	
				Pinegrass	
				Rose	
				Saskatoon serviceberry	
				White spirea	
		606: Benewah-----	Grand fir/ninebark (CN506)	Favorable	---
Normal	---			Oceanspray	
Unfavorable	---			Baldhip rose	
				Common snowberry	
				Heartleaf arnica	
				Idaho goldthread	
				Oregon fairybells	
				Pinegrass	
				Saskatoon serviceberry	
				Sweet-scented bedstraw	
				Western meadow-rue	
				White spirea	

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
606: Rasser-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Columbia brome Common snowberry Heartleaf arnica Honeysuckle Pinegrass Rose Saskatoon serviceberry White spirea
610: Schumacher-----	LOAMY 16-22 FEID-PSSPS (R009XY003ID)	Favorable Normal Unfavorable	2,200 1,700 1,300	Bluebunch wheatgrass Idaho fescue Big bluegrass Nineleaf lomatium Arrowleaf balsamroot Buckwheat Common snowberry Common yarrow Phlox Penstemon
611: Schumacher-----	LOAMY 16-22 FEID-PSSPS (R009XY003ID)	Favorable Normal Unfavorable	2,200 1,700 1,300	Bluebunch wheatgrass Idaho fescue Big bluegrass Nineleaf lomatium Arrowleaf balsamroot Buckwheat Common snowberry Common yarrow Phlox Penstemon
Tekoa-----	SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)	Favorable Normal Unfavorable	1,600 1,300 1,000	Bluebunch wheatgrass Idaho fescue Arrowleaf balsamroot Sandberg bluegrass Nineleaf lomatium Common yarrow

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
612: Libertybutte-----	SHALLOW SOUTH SLOPE STONY 16-22 PSSPS-POSE (R009XY026ID)		Lb/acre		
		Favorable	850	Bluebunch wheatgrass	
		Normal	650	Sandberg bluegrass	
		Unfavorable	400	Arrowleaf balsamroot	
				Common yarrow	
				Lupine	
Tekoa-----	SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)	Favorable	1,600	Bluebunch wheatgrass	
		Normal	1,300	Idaho fescue	
		Unfavorable	1,000	Arrowleaf balsamroot	
				Sandberg bluegrass	
				Nineleaf lomatium	
				Common yarrow	
613: Ardenvoir, dry-----	Douglas-fir/ninebark (CN260)	Favorable	---	Oceanspray	
		Normal	---	Common snowberry	
		Unfavorable	---	Mallow ninebark	
				Brome	
				Elk sedge	
				Idaho fescue	
Lotuspoint-----	Douglas-fir/ninebark (CN260)			Pinegrass	
				Rose	
				Ross' sedge	
				White spirea	
		Favorable	---	Oceanspray	
		Normal	---	Common snowberry	
	Unfavorable	---	Elk sedge		
			Mallow ninebark		
			Baldhip rose		
			Bluebunch wheatgrass		
			Idaho fescue		
			Pinegrass		
			Saskatoon serviceberry		
			White spirea		

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
614: Ardenvoir, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	---	Lb/acre	Oceanspray Common snowberry Mallow ninebark Brome Elk sedge Idaho fescue Pinegrass Rose Ross' sedge White spirea
Lotuspoint-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	---		Oceanspray Common snowberry Elk sedge Mallow ninebark Baldhip rose Bluebunch wheatgrass Idaho fescue Pinegrass Saskatoon serviceberry White spirea
617: Tekoa-----	SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)	Favorable Normal Unfavorable	1,600 1,300 1,000		Bluebunch wheatgrass Idaho fescue Arrowleaf balsamroot Sandberg bluegrass Nineleaf lomatum Common yarrow
621: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---		Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
625: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan
Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
650: Grangemont-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Darkwoods violet Foamflower Idaho goldthread Longtube twinflower Myrtle pachistima Oregon fairybells Queencup bead lily Starry false Solomon's s Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegetation
		Kind of year	Dry Weight	
651: Kingspeak-----	Western redcedar/queencup beadlily (CNS30)		<i>Lb/acre</i>	
		Favorable	---	Creambush oceanspray
		Normal	---	Mallow ninebark
		Unfavorable	---	Rocky Mountain maple
				Bog birch
				Common snowberry
				Foamflower
				Idaho goldthread
				Longtube twinflower
				Oregon fairybells
				Queencup bead lily
				Rose
				Saskatoon serviceberry
				Starry false Solomon's seal
				Sweet-scented bedstraw
Shayhill, stony surface-----	Western redcedar/queencup beadlily (CNS30)			Western rattlesnake plantain
				Western thimbleberry
		Favorable	---	Creambush oceanspray
		Normal	---	Baldhip rose
		Unfavorable	---	Big huckleberry
				False lily of the valley
				Idaho goldthread
				Longtube twinflower
				Myrtle pachistima
				Pathfinder
				Queencup bead lily
				Rocky Mountain maple
				Ross' sedge
				Sweet-scented bedstraw
				Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegetation
		Kind of year	Dry Weight		
652: Kingspeak-----	Western redcedar/queencup beadlily (CN530)			Lb/acre	
		Favorable	---		Creambush oceanspray
		Normal	---		Mallow ninebark
		Unfavorable	---		Rocky Mountain maple
					Bog birch
					Common snowberry
					Foamflower
					Idaho goldthread
					Longtube twinflower
					Oregon fairybells
					Queencup bead lily
					Rose
					Saskatoon serviceberry
653: Kingspeak, cool-----	Western hemlock/queencup beadlily (CN570)				Starry false Solomon's s
					Sweet-scented bedstraw
					Western rattlesnake plan
					Western thimbleberry
		Favorable	---		Creambush oceanspray
		Normal	---		Saskatoon serviceberry
		Unfavorable	---		Blue huckleberry
					Common snowberry
					Darkwoods violet
					Foamflower
					Idaho goldthread
					Longtube twinflower
					Mallow ninebark
					Oregon fairybells
					Pyrola
					Queencup bead lily
					Rocky Mountain maple
					Rose
					Starry false Solomon's s
					Sweet-scented bedstraw
					Western rattlesnake plan
					Western thimbleberry

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
655: Tigley, moist-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---	---
				Lb/acre
				Creambush oceanspray
				Rocky Mountain maple
				Saskatoon serviceberry
				American trailplant
				False Solomon's seal
				Goldthread
				Longtube twinflower
				Mallow ninebark
				Myrtle boxwood
				Oregon fairybells
				Paper birch
				Pinegrass
				Piper anemone
				Pyrola
				Queencup beadlily
				Sweet-scented bedstraw
				White spirea
656: Kingspeak, dry-----	Grand fir/queencup beadlily (CN520)	Favorable Normal Unfavorable	---	---
				Common snowberry
				Creambush oceanspray
				Mallow ninebark
				Saskatoon serviceberry
				Foamflower
				Idaho goldthread
				Longtube twinflower
				Oregon fairybells
				Pinegrass
				Queencup bead lily
				Rose
				Ross' sedge
				Starry false Solomon's s
				Sweet-scented bedstraw
				Western rattlesnake plan
				Western thimbleberry

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegetation
		Kind of year	Dry Weight		
660: Threebear-----	Western hemlock/queencup beadlily (CN570)		Lb/acre		
		Favorable	---		Creambush oceanspray
		Normal	---		Myrtle pachistima
		Unfavorable	---		Baldhip rose
					Idaho goldthread
					Longtube twinflower
					Oneleaf foamflower
					Oregon fairybells
					Prince's pine
					Queencup bead lily
662: Threebear, warm-----	Western redcedar/queencup beadlily (CN530)				Spirea
					Starry false Solomon's seal
					Sweet-scented bedstraw
					Western rattlesnake plantain
		Favorable	---		Creambush oceanspray
		Normal	---		Baldhip rose
		Unfavorable	---		Columbia brome
					Elk sedge
					Idaho goldthread
					Longtube twinflower
					Myrtle pachistima
					Pathfinder
					Prince's pine
					Queencup bead lily
					Rocky Mountain maple
					Spirea
					Starry false Solomon's seal
					Sweet-scented bedstraw
					Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
663: Thresbear, warm-----	Western redcedar/queencup beadlily (CN530)		Lb/acre	
		Favorable	---	Creambush oceanspray
		Normal	---	Baldhip rose
		Unfavorable	---	Columbia brome
				Elk sedge
				Idaho goldthread
				Longtube twinflower
				Myrtle pachistima
				Pathfinder
				Prince's pine
				Queencup bead lily
				Rocky Mountain maple
				Spirea
				Starry false Solomon's s
				Sweet-scented bedstraw
				Western meadow-rue
Porrett-----	MEADOW (R009XY018ID)	Favorable	4,500	Tufted hairgrass
		Normal	3,500	Nebraska sedge
		Unfavorable	2,500	Alpine timothy
				Bulrush
				Cinquefoil
				Clover
				Curled dock
				Lambstongue ragwort
				Meadow barley
				Northern water plantain
				Prairiesmoke
				Rush
				Slender wheatgrass
				Western aster
				Willow
		665: Grangemont, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable
Normal	---			Darkwoods violet
Unfavorable	---			Foamflower
				Idaho goldthread
				Longtube twinflower
				Myrtle pachistima
				Oregon fairybells
				Queencup bead lily
				Starry false Solomon's s

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
670: HoneyJones, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Blue huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beadlily Rocky Mountain maple Western rattlesnake plan
671: HoneyJones-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Rocky Mountain maple Saskatoon serviceberry Thinleaf huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beadlily Western rattlesnake plan
680: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
680: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan
681: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegetation
		Kind of year	Dry Weight	
681: Ahrs-----	Grand fir/queencup beادلily (CN520)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Baldhip rose Big huckleberry Common snowberry Elk sedge Idaho goldthread Longtube twinflower Mallow ninebark Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Utah honeysuckle Western meadow-rue
700: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
700: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Common snowberry Darkwoods violet Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Pacific trillium Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan
701: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
McCrosket-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Common yarrow Pinegrass Rose Strawberry Thimbleberry White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
703: Ardenvoir, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Brome Elk sedge Idaho fescue Pinegrass Rose Ross' sedge White spirea
Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's Sweet-scented bedstraw Western meadow-rue
704: Ardenvoir, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Brome Elk sedge Idaho fescue Pinegrass Rose Ross' sedge White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegetation
		Kind of year	Dry Weight	
704: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
705: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
Rasser-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Columbia brome Common snowberry Heartleaf arnica Honeysuckle Pinegrass Rose Saskatoon serviceberry White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
706: Ardenvoir-----	Grand fir/ninebark (CN506)		Lb/acre	
		Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Dogtooth lily
				Elk sedge
				Heartleaf arnica
				Idaho goldthread
				Myrtle pachistima
				Oregon fairybells
				Pinegrass
				Piper's anemone
				Rocky Mountain maple
707: Huckle, dry-----	Grand fir/queencup beادلily (CN520)	Favorable	---	Saskatoon serviceberry
		Normal	---	Starry false Solomon's s
		Unfavorable	---	Sweet-scented bedstraw
				Western meadow-rue
				Oceanspray
				Baldhip rose
				Common snowberry
				Idaho goldthread
				Longtube twinflower
				Mallow ninebark
				Myrtle pachistima
				Oregon fairybells
				Pathfinder
				Prince's pine
				Queencup bead lily
				Rocky Mountain maple
				Saskatoon serviceberry
				Starry false Solomon's s
				Utah honeysuckle
				Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
707: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
710: McCrosket-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Common yarrow Pinegrass Rose Strawberry Thimbleberry White spirea
Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
711: McCrosket-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Common yarrow Pinegrass Rose Strawberry Thimbleberry White spirea
Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
712: McCrosket-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Mallow ninebark Common yarrow Pinegrass Rose Strawberry Thimbleberry White spirea
Tekoa-----	SOUTH SLOPE LOAMY 16-22 PSSPS-FEID (R009XY004ID)	Favorable Normal Unfavorable	1,600 1,300 1,000	Bluebunch wheatgrass Idaho fescue Arrowleaf balsamroot Sandberg bluegrass Nineleaf lomatium Common yarrow

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta		
		Kind of year	Dry Weight				
716: Ahrs-----	Grand fir/queencup beادلily (CN520)			<i>Lb/acre</i>			
		Favorable	---		Oceanspray		
		Normal	---		Baldhip rose		
		Unfavorable	---		Big huckleberry		
					Common snowberry		
					Elk sedge		
					Idaho goldthread		
					Longtube twinflower		
					Mallow ninebark		
					Myrtle pachistima		
					Pathfinder		
					Queencup bead lily		
					Rocky Mountain maple		
					Saskatoon serviceberry		
720: Huckle-----	Western redcedar/queencup beادلily (CN530)	Favorable	---		Baldhip rose		
		Normal	---		Common snowberry		
		Unfavorable	---		Idaho goldthread		
					Longtube twinflower		
					Myrtle pachistima		
					Oneleaf foamflower		
					Oregon fairybells		
					Prince's pine		
					Queencup bead lily		
					Rocky Mountain maple		
					Starry false Solomon's s		
					Western rattlesnake plan		
		721: Huckle-----	Western redcedar/queencup beادلily (CN530)	Favorable	---		Baldhip rose
				Normal	---		Common snowberry
Unfavorable	---				Idaho goldthread		
					Longtube twinflower		
					Myrtle pachistima		
					Oneleaf foamflower		
					Oregon fairybells		
					Prince's pine		
					Queencup bead lily		
					Rocky Mountain maple		
					Starry false Solomon's s		
					Western rattlesnake plan		

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
721: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
735: Lotuspoint, stony surface-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Elk sedge Mallow ninebark Baldhip rose Bluebunch wheatgrass Idaho fescue Pinegrass Saskatoon serviceberry White spirea
736: Lotuspoint, stony surface-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Elk sedge Mallow ninebark Baldhip rose Bluebunch wheatgrass Idaho fescue Pinegrass Saskatoon serviceberry White spirea
Rock outcrop.				

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
756: Tigley-----	Grand fir/queencup beادلily (CN520)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Mallow ninebark Saskatoon serviceberry White spirea False Solomon's seal Goldthread Longtube twinflower Myrtle boxwood Pinegrass Pinegrass Piper anemone Queencup beادلily Rocky Mountain maple Strawberry Sweet-scented bedstraw Western meadow-rue
757: Hugus, warm-----	Western redcedar/queencup beادلily (CN530)	Favorable Normal Unfavorable	--- --- ---	Myrtle pachistima Baldhip rose Idaho goldthread Longtube twinflower Queencup bead lily Rocky Mountain maple Starry false Solomon's Sweet-scented bedstraw Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
758: Tigley, moist-----	Western redcedar/queencup beadlily (CN530)		Lb/acre	
		Favorable	---	Creambush oceanspray
		Normal	---	Rocky Mountain maple
		Unfavorable	---	Saskatoon serviceberry
				American trailplant
				False Solomon's seal
				Goldthread
				Longtube twinflower
				Malow ninebark
				Myrtle boxwood
				Oregon fairybells
				Paper birch
				Pinegrass
				Piper anemone
				Pyrola
				Queencup beadlily
				Sweet-scented bedstraw
Hugus-----	Western hemlock/queencup beadlily (CN570)			White spirea
		Favorable	---	Myrtle pachistima
		Normal	---	Baldhip rose
		Unfavorable	---	Idaho goldthread
				Longtube twinflower
				Queencup bead lily
				Rocky Mountain maple
				Starry false Solomon's
				Sweet-scented bedstraw
				Western meadow-rue
765: Saint Maries-----	Western redcedar/queencup beadlily (CN530)			
		Favorable	---	Baldhip rose
		Normal	---	Common snowberry
		Unfavorable	---	Idaho goldthread
				Longtube twinflower
				Malow ninebark
				Oceanspray
				Oregon fairybells
				Pathfinder
				Queencup bead lily
				Rocky Mountain maple
				Starry false Solomon's
				Thimbleberry
				Western swordfern
				White spirea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
765: Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Baldhip rose Common snowberry Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan
770: Pinecreek-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Common snowberry Elk sedge Myrtle pachistima Pinegrass Rocky Mountain maple Rose Saskatoon serviceberry Scouler's willow Smallflower miterwort Strawberry White spirea
771: Honeyjones, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Blue huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beadlily Rocky Mountain maple Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
772: HoneyJones, warm-----	Western redcedar/queencup beadlily (CN530)		Lb/acre	
		Favorable	---	Blue huckleberry
		Normal	---	Baldhip rose
		Unfavorable	---	Idaho goldthread
				Longtube twinflower
				Prince's pine
				Queencup beadlily
				Rocky Mountain maple
				Western rattlesnake plan
Ahrs-----	Grand fir/queencup beadlily (CN520)	Favorable	---	Oceanspray
		Normal	---	Baldhip rose
		Unfavorable	---	Big huckleberry
				Common snowberry
				Elk sedge
				Idaho goldthread
				Longtube twinflower
				Mallow ninebark
				Myrtle pachistima
				Pathfinder
773: HoneyJones, dry-----	Grand fir/queencup beadlily (CN520)			Queencup bead lily
				Rocky Mountain maple
				Saskatoon serviceberry
				Starry false Solomon's s
				Utah honeysuckle
				Western meadow-rue
		Favorable	---	Creambush oceanspray
		Normal	---	Mallow ninebark
		Unfavorable	---	Pachystima
				Saskatoon serviceberry
				Baldhip rose
				Blue huckleberry
				Common snowberry
				Idaho goldthread
				Longtube twinflower
				Prince's pine
				Queencup beadlily
				Rocky Mountain maple
				Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
774: Pinecreek, moist-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Lb/acre	Mallow ninebark Oceanspray Big huckleberry Common snowberry Elk sedge Myrtle pachistima Pinegrass Rocky Mountain maple Rose Saskatoon serviceberry Scouler's willow Smallflower miterwort Strawberry White spirea
775: Pinecreek, moist-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---		Mallow ninebark Oceanspray Big huckleberry Common snowberry Elk sedge Myrtle pachistima Pinegrass Rocky Mountain maple Rose Saskatoon serviceberry Scouler's willow Smallflower miterwort Strawberry White spirea
776: Cassychill-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---		Idaho fescue Common snowberry Brome Arrowleaf balsamroot Bluebunch wheatgrass Common yarrow Lupine Oceanspray Saskatoon serviceberry

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
777: Boulder creek, warm----	Western redcedar/queencup beadlily (CN530)		Lb/acre	
		Favorable	---	Anemone
		Normal	---	Baldhip rose
		Unfavorable	---	Big huckleberry
				Buffaloberry
				Elk sedge
				Idaho goldthread
				Longtube twinflower
				Mallow ninebark
				Oceanspray
				Oregon fairybells
				Queencup bead lily
				Rocky Mountain maple
778: Cassyhill-----	Ponderosa pine/common snowberry (CN170)			Saskatoon serviceberry
				Sidebells wintergreen
				Starry false Solomon's s
		Favorable	---	Idaho fescue
		Normal	---	Common snowberry
		Unfavorable	---	Brome
				Arrowleaf balsamroot
				Bluebunch wheatgrass
				Common yarrow
				Lupine
				Oceanspray
				Saskatoon serviceberry
Lotus point-----	Douglas-fir/ninebark (CN260)			
		Favorable	---	Oceanspray
		Normal	---	Common snowberry
		Unfavorable	---	Elk sedge
				Mallow ninebark
				Baldhip rose
				Bluebunch wheatgrass
				Idaho fescue
				Pinegrass
				Saskatoon serviceberry
				White spirea

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
779: Bouldercreek-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	---	---	Big huckleberry Arnica Bunchberry dogwood Columbia brome Idaho goldthread Longtube twinflower Pinegrass Prince's pine Pyrola Queencup bead lily Starry false Solomon's s Sweet-scented bedstraw Western rattlesnake plan
780: Ardenvoir-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	---	---	Common snowberry Mallow ninebark Oceanspray Dogtooth lily Elk sedge Heartleaf arnica Idaho goldthread Myrtle pachistima Oregon fairybells Pinegrass Piper's anemone Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western meadow-rue
Huckle-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	---	---	Baldhip rose Common snowberry Idaho goldthread Longtube twinflower Myrtle pachistima Oneleaf foamflower Oregon fairybells Prince's pine Queencup bead lily Rocky Mountain maple Starry false Solomon's s Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
780: Saint Maries, dry-----	Grand fir/queencup beadlily (CN520)		Lb/acre	
		Favorable	---	Common snowberry
		Normal	---	Mallow ninebark
		Unfavorable	---	Oceanspray
				Rocky Mountain maple
				Baldhip rose
				Columbia brome
				Elk sedge
				Idaho goldthread
				Longtube twinflower
				Pinegrass
				Queencup bead lily
				Starry false Solomon's s
				Sweet-scented bedstraw
				Thimbleberry
		White spirea		
781: Ahrs, moist-----	Western redcedar/queencup beadlily (CN530)	Favorable	---	Oceanspray
		Normal	---	Rocky Mountain maple
		Unfavorable	---	Baldhip rose
				Big huckleberry
				Common snowberry
				Idaho goldthread
				Longtube twinflower
				Mallow ninebark
				Myrtle pachistima
				Pathfinder
				Queencup bead lily
				Saskatoon serviceberry
				Starry false Solomon's s
				Utah honeysuckle
				Elk sedge
		Idaho trillium		
		Strawberry		
		Western meadow-rue		
Honeyjones, warm-----	Western redcedar/queencup beadlily (CN530)	Favorable	---	Blue huckleberry
		Normal	---	Baldhip rose
		Unfavorable	---	Idaho goldthread
				Longtube twinflower
				Prince's pine
				Queencup beadlily
				Rocky Mountain maple
		Western rattlesnake plan		

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
782: Ardenvoir, dry-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Lb/acre Common snowberry Mallow ninebark Oceanspray Rose White spirea Idaho fescue Brome Pinegrass Elk sedge Ross' sedge	
Cassychill-----	Ponderosa pine/common snowberry (CN170)	Favorable Normal Unfavorable	--- --- ---	Idaho fescue Common snowberry Brome Arrowleaf balsamroot Bluebunch wheatgrass Common yarrow Lupine Oceanspray Saskatoon serviceberry	
784: Pinecreek, moist-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Oceanspray Big huckleberry Common snowberry Elk sedge Myrtle pachistima Pinegrass Rocky Mountain maple Rose Saskatoon serviceberry Scouler's willow Smallflower miterwort Strawberry White spirea	

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
784: Lotuspoint-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Common snowberry Elk sedge Mallow ninebark Baldhip rose Bluebunch wheatgrass Idaho fescue Pinegrass Saskatoon serviceberry White spirea
791: Latour-----	Mountain hemlock/queencup beadlily-beargrass phase (CN687)	Favorable Normal Unfavorable	--- --- ---	Blue huckleberry Common beargrass Shrub Pachystima Rustyleaf menziesia Darkwoods violet Perennial forbs Piper's anemone Prince's pine Pyrola Queencup beadlily Western rattlesnake plan
800: Rock outcrop.				
801: Pits, gravel.				

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
802: Kingspeak-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Lb/acre Creambush oceanspray Mallow ninebark Rocky Mountain maple Bog birch Common snowberry Foamflower Idaho goldthread Longtube twinflower Oregon fairybells Queencup bead lily Rose Saskatoon serviceberry Starry false Solomon's s Sweet-scented bedstraw Western rattlesnake plan Western thimbleberry
Urban land.				
900: Water.				
901: Aquandic Endoaquepts--	Western hemlock/wild ginger (CN575)	Favorable Normal Unfavorable	--- --- ---	Black hawthorn Rocky Mountain maple Scouler willow Sitka alder Forbs Perennial grasses Longtube twinflower Other shrubs Pyrola Thimbleberry Carex Wild ginger

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
901: Aquic Udifluvents-----	Western redcedar/queencup beadlily (CN530)	Favorable Normal Unfavorable	--- --- ---	Black hawthorn Mallow ninebark Rocky Mountain maple Scouler willow Sitka alder Forbs Perennial grasses Longtube twinflower Other shrubs Pyrola Thimbleberry Carex Queencup beadlily
902: Ahrs-----	Grand fir/queencup beadlily (CN520)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Baldhip rose Big huckleberry Common snowberry Elk sedge Idaho goldthread Longtube twinflower Mallow ninebark Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Utah honeysuckle Western meadow-rue

Table 12.---Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
903: Ahrs-----	Grand fir/queencup beادلily (CN520)	Favorable Normal Unfavorable	--- --- ---	Lb/acre	Oceanspray Baldhip rose Big huckleberry Common snowberry Elk sedge Idaho goldthread Longtube twinflower Mallow ninebark Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Utah honeysuckle Western meadow-rue
Pinecreek-----	Douglas-fir/ninebark (CN260)	Favorable Normal Unfavorable	--- --- ---		Mallow ninebark Oceanspray Common snowberry Elk sedge Myrtle pachistima Pinegrass Rocky Mountain maple Rose Saskatoon serviceberry Scouler's willow Smallflower miterwort Strawberry White spirea
907: Honeyjones-----	Western hemlock/queencup beادلily (CN570)	Favorable Normal Unfavorable	--- --- ---		Creambush oceanspray Rocky Mountain maple Saskatoon serviceberry Thinleaf huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beادلily Western rattlesnake plan

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
908: Honeyjones-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Lb/acre Creambush oceanspray Rocky Mountain maple Saskatoon serviceberry Thinleaf huckleberry Baldhip rose Idaho goldthread Longtube twinflower Prince's pine Queencup beadlily Western rattlesnake plan
Ahrs-----	Grand fir/queencup beadlily (CN520)	Favorable Normal Unfavorable	--- --- ---	Oceanspray Baldhip rose Big huckleberry Common snowberry Elk sedge Idaho goldthread Longtube twinflower Mallow ninebark Myrtle pachistima Pathfinder Queencup bead lily Rocky Mountain maple Saskatoon serviceberry Starry false Solomon's s Utah honeysuckle Western meadow-rue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
913: Hobo-----	Western hemlock/queencup beadlily (CN570)	Favorable Normal Unfavorable	--- --- ---	Creambush oceanspray Thinleaf alder Baldhip rose Common snowberry Idaho goldthread Longtube twinflower Myrtle pachistima Pacific trillium Pathfinder Queencup bead lily Rocky Mountain maple Starry false Solomon's s Sweet-scented bedstraw Sweetcicely Western meadow-rue Western rattlesnake plan Western thimbleberry
Ac1: Arson-----	Grand fir/ninebark (CN506)	Favorable Normal Unfavorable	--- --- ---	Mallow ninebark Heartleaf arnica Creambush oceanspray Common snowberry Pine reedgrass Baldhip rose Rocky Mountain maple Saskatoon serviceberry Woodland strawberry Low Oregongrape Birchleaf spirea Blue huckleberry Sweet-scented bedstraw American trailplant Sideflower miterwort Starry false solomon sea

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
Acl: Carlinton-----	Grand fir/ninebark (CN506)			Lb/acre	
		Favorable	650		Mallow ninebark
		Normal	400		Heartleaf arnica
		Unfavorable	150		Creambush oceanspray
					Common snowberry
					Pine reedgrass
					Baldhip rose
					Rocky Mountain maple
					Saskatoon serviceberry
					Woodland strawberry
					Low Oregongrape
					Birchleaf spirea
					Blue huckleberry
Ac2: Arson, dry-----	Douglas-fir/ninebark (CN260)				Sweet-scented bedstraw
					American trailplant
					Sideflower miterwort
					Starry false solomon sea
		Favorable	---		Mallow ninebark
		Normal	---		Pine reedgrass
		Unfavorable	---		Creambush oceanspray
					Common snowberry
					Elk sedge
					Bluebunch wheatgrass
					Lewis mockorange
					Rocky Mountain maple
					Birchleaf spirea
					Saskatoon serviceberry
					Low Oregongrape
					Arrowleaf balsamroot
					Baldhip rose
					Woodland strawberry
					Colombia brome
					False Solomon's seal
					Goldthread
					Idaho fescue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production			Characteristic vegeta
		Kind of year	Dry Weight		
Ac2: Carlinton, dry-----	Douglas-fir/ninebark (CN260)			Lb/acre	
		Favorable	650		Mallow ninebark
		Normal	400		Pine reedgrass
		Unfavorable	150		Creambush oceanspray
					Common snowberry
					Elk sedge
					Bluebunch wheatgrass
					Lewis mockorange
					Rocky Mountain maple
					Birchleaf spirea
					Saskatoon serviceberry
					Low Oregongrape
					Arrowleaf balsamroot
					Baldhip rose
					Woodland strawberry
					Colombia brome
					False Solomon's seal
					Goldthread
					Idaho fescue
An4: Arson, dry-----	Douglas-fir/ninebark (CN260)				
		Favorable	---		Mallow ninebark
		Normal	---		Pine reedgrass
		Unfavorable	---		Creambush oceanspray
					Common snowberry
					Elk sedge
					Bluebunch wheatgrass
					Lewis mockorange
					Rocky Mountain maple
					Birchleaf spirea
					Saskatoon serviceberry
					Low Oregongrape
					Arrowleaf balsamroot
					Baldhip rose
					Woodland strawberry
					Colombia brome
					False Solomon's seal
					Goldthread
					Idaho fescue

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta	
		Kind of year	Dry Weight		
An4: Minaloosa, dry-----	Douglas-fir/ninebark (CN260)		Lb/acre		
		Favorable	---	Mallow ninebark	
		Normal	---	Pine reedgrass	
		Unfavorable	---	Creambush oceanspray	
				Common snowberry	
				Elk sedge	
				Bluebunch wheatgrass	
				Lewis mockorange	
				Rocky Mountain maple	
				Birchleaf spirea	
				Saskatoon serviceberry	
				Low Oregongrape	
				Arrowleaf balsamroot	
				Baldhip rose	
RS2: Reggear, moist-----	Western redcedar/queencup beadlily (CN530)			Woodland strawberry	
				Colombia brome	
				False Solomon's seal	
				Goldthread	
				Idaho fescue	
		Favorable	400	Goldthread	
		Normal	200	Northern twinflower	
		Unfavorable	50	Mallow ninebark	
				Rocky Mountain maple	
				Blue huckleberry	
				Myrtle pachistima	
				Bunchberry dogwood	
				Queencup bead lily	
		Common princes pine			
		Common snowberry			
		Baldhip rose			
		Hooker fairybells			
		Starry false Solomon's s			
		Thimbleberry			
		Birchleaf spirea			
		American trailplant			
		Coolwort foamflower			
		Darkwoods violet			
		Low Oregongrape			
		Pine reedgrass			

Table 12.--Ecological Sites, Habitat Types, and Characteristic Plant Communities--Cont

Map symbol and soil name	Ecological site or habitat type	Total production		Characteristic vegeta
		Kind of year	Dry Weight	
Rs2: Stewah-----	Western redcedar/queencup beadlily (CN530)		Lb/acre	
		Favorable	---	Goldthread
		Normal	---	Northern twinflower
		Unfavorable	---	Mallow ninebark
				Rocky Mountain maple
				Blue huckleberry
				Myrtle pachistima
				Bunchberry dogwood
				Queencup bead lily
				Common princes pine
				Common snowberry
				Baldhip rose
				Hooker fairybells
				starry false Solomon's s
				Thimbleberry
				Birchleaf spirea
				American trailplant
				Coolwort foamflower
				Darkwoods violet
				Low Oregongrape
				Pine reedgrass

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity

(Only the soils that support forestland are listed. Absence of an entry indicates that the soil does not support trees or data was not estimated.)

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
200: Blinn, stony surface----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	97 77 --- 82 86	100 50 100 50 50	97 96 --- 126 125	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
201: Blinn, stony surface----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	97 77 --- 82 86	100 50 100 50 50	97 96 --- 126 125	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
202: Blinn, stony surface----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	97 77 --- 82 86	100 50 100 50 50	97 96 --- 126 125	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Bobbitt, stony surface--	Ponderosa pine----- Rocky Mountain Douglas-fir-----	77 74	100 50	64 88	Ponderosa pine, Rocky Mountain Douglas-fir
210: Agatha, stony surface---	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 74 --- --- 76	100 50 100 50 50	--- 88 --- --- 106	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
212: Agatha, stony surface---	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 74 --- --- 76	100 50 100 50 50	--- 88 --- --- 106	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
230: Lacy, stony surface----- Rock outcrop.	Ponderosa pine----- 	81 	100 	70 	Ponderosa pine

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
231: Lacy, very stony surface Rock outcrop.	Ponderosa pine-----	81	100	70	Ponderosa pine
232: Lacy, stony surface-----	Ponderosa pine-----	81	100	70	Ponderosa pine
Bobbitt, stony surface--	Ponderosa pine-----	77	100	64	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir
233: Lacy, very stony surface	Ponderosa pine-----	81	100	70	Ponderosa pine
Bobbitt, very stony surface-----	Ponderosa pine-----	77	100	64	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir
250: Dorb, warm, stony surface-----	Rocky Mountain				Rocky Mountain
	Douglas fir-----	91	50	132	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	104	50	161	western white
	Western white pine--	76	50	146	pine, western red
	Western redcedar----	---	100	---	cedar
255: Shayhill, stony surface	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	95	50	143	western white
	Western white pine--	73	50	141	pine, western red
	Western red cedar----	---	100	---	cedar
256: Shayhill, stony surface	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	95	50	143	western white
	Western white pine--	73	50	141	pine, western red
	Western red cedar----	---	100	---	cedar
257: Shayhill, dry, stony surface-----	Ponderosa pine-----	---	100	---	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	---	50	---	western white pine
	Western white pine--	---	50	---	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
260: Seddow-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- --- --- --- ---	100 50 100 50 50	--- --- --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch
261: Sly, dry-----	Ponderosa pine----- Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- --- --- --- --- 65 ---	100 50 100 50 50 50 50	--- --- --- --- --- 85 ---	Ponderosa pine, Rocky Mountain Douglas fir, lodgepole pine, western larch, western white pine
Shayhill, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- --- --- --- --- --- ---	100 50 100 50 50 50 50	--- --- --- --- --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
262: Seddow-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- --- --- --- --- ---	100 50 100 50 50	--- --- --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch
Sly, dry-----	Ponderosa pine----- Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- --- --- --- --- 65 ---	100 50 100 50 50 50 50	--- --- --- --- --- 85 ---	Ponderosa pine, Rocky Mountain Douglas fir, lodgepole pine, western larch, western white pine
300: Taney-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	93 --- 77	100 50	90 96	Ponderosa pine, Rocky Mountain Douglas-fir
301: Taney-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	93 --- 77	100 50	90 96	Ponderosa pine, Rocky Mountain Douglas-fir

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
303: Carlinton-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	105 75 --- --- ---	100 50 100 50 50	112 91 --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Benewah-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	105 80 --- 71 ---	100 50 100 50 50	112 103 --- 103 ---	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
304: Benewah-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	105 80 --- 71 ---	100 50 100 50 50	112 103 --- 103 ---	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Santa-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	111 66 --- --- 111	100 50 100 50 50	124 69 --- --- 175	Rocky Mountain Douglas-fir, western larch
310: Santa-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	111 66 --- --- 111	100 50 100 50 50	124 69 --- --- 175	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
311: Santa-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	111 66 --- --- 111	100 50 100 50 50	124 69 --- --- 175	Rocky Mountain Douglas-fir, western larch
314: Sharptop-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 70 --- --- ---	100 50 100 50 50	--- 79 --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
314: Santa-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	111 66 --- --- 111	100 50 100 50 50	124 69 --- --- 175	Rocky Mountain Douglas-fir, western larch
315: Setters-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	86 ---	100 50	78 ---	Ponderosa pine, Rocky Mountain Douglas-fir
316: Setters-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	86 ---	100 50	78 ---	Ponderosa pine, Rocky Mountain Douglas-fir
Taney-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	93 77	100 50	90 96	Ponderosa pine, Rocky Mountain Douglas-fir
320: Reggear-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- 69 --- --- 71 ---	100 50 100 50 50 50	--- 76 --- --- 97 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
321: Reggear, moist-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- 95 --- ---	50 100 50 50 50 100	--- --- --- 143 --- ---	Rocky Mountain Douglas fir, western larch, grand fir, western white pine, western red cedar
322: Reggear, moist-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- 95 --- ---	50 100 50 50 50 100	--- --- --- 143 --- ---	Rocky Mountain Douglas fir, western larch, grand fir, western white pine, western red cedar
Sly-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	93 --- --- 99 90 ---	50 100 50 50 50 100	138 --- --- 151 171 ---	Rocky Mountain Douglas fir, lodgepole pine, western larch, grand fir, western white pine, western red cedar

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
323: Bechtel-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	120 82 --- 77 86 ---	100 50 100 50 50 50	141 108 --- 116 125 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch
Reggear-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- 69 --- --- 71 ---	100 50 100 50 50 50	--- 76 --- --- 97 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
325: Reggear-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- 69 --- --- 71 ---	100 50 100 50 50 50	--- 76 --- --- 97 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
Sharptop, basalt substratum-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 70 --- --- ---	100 50 100 50 50	--- 79 --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch
326: Reggear-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- 69 --- --- 71 ---	100 50 100 50 50 50	--- 76 --- --- 97 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
Seddow-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- --- --- --- ---	100 50 100 50 50	--- --- --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch
330: Carlinton-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	105 75 --- --- ---	100 50 100 50 50	112 91 --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, western larch

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
330: Carlinton, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	116 --- ---	100 50 ---	134 --- ---	Ponderosa pine, Rocky Mountain Douglas-fir
335: Carlinton, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	116 --- ---	100 50 ---	134 --- ---	Ponderosa pine, Rocky Mountain Douglas-fir
336: Carlinton, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	116 --- ---	100 50 ---	134 --- ---	Ponderosa pine, Rocky Mountain Douglas-fir
Taney-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	93 77 ---	100 50 ---	90 96 ---	Ponderosa pine, Rocky Mountain Douglas-fir
340: Arson-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 76 --- 85 96	100 50 100 50 50	--- 93 --- 132 145	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Lotuspoint-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	69 71 ---	100 50 ---	54 81 ---	Ponderosa pine, Rocky Mountain Douglas-fir
341: Sinkler-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	75 67 --- --- ---	100 50 100 50 50	62 72 --- --- ---	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Arson-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	--- 76 --- 85 96	100 50 100 50 50	--- 93 --- 132 145	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
342: Sinkler, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	106 --- ---	100 50 ---	114 --- ---	Ponderosa pine, Rocky Mountain Douglas-fir
Arson, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	89 75 ---	100 50 ---	83 91 ---	Ponderosa pine, Rocky Mountain Douglas-fir

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
350: Southwick-----	Ponderosa pine-----	85	100	77	Ponderosa pine
351: Southwick-----	Ponderosa pine-----	85	100	77	Ponderosa pine
353: Tensed-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	88 ---	100 50	82 ---	Ponderosa pine, Rocky Mountain Douglas fir
Pedee-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	75 ---	100 50	62 ---	Ponderosa pine, Rocky Mountain Douglas fir
354: Tensed-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	88 ---	100 50	82 ---	Ponderosa pine, Rocky Mountain Douglas fir
Pedee-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	75 ---	100 50	62 ---	Ponderosa pine, Rocky Mountain Douglas fir
355: Southwick-----	Ponderosa pine-----	85	100	77	Ponderosa pine
Driscoll-----	Ponderosa pine-----	80	100	69	Ponderosa pine
356: Southwick-----	Ponderosa pine-----	85	100	77	Ponderosa pine
Driscoll-----	Ponderosa pine-----	80	100	69	Ponderosa pine
360: Larkin-----	Ponderosa pine-----	90	100	85	Ponderosa pine
361: Larkin-----	Ponderosa pine-----	90	100	85	Ponderosa pine
363: Larkin-----	Ponderosa pine-----	90	100	85	Ponderosa pine
Driscoll-----	Ponderosa pine-----	80	100	69	Ponderosa pine
364: Larkin-----	Ponderosa pine-----	90	100	85	Ponderosa pine
Southwick-----	Ponderosa pine-----	85	100	77	Ponderosa pine
367: Larkin-----	Ponderosa pine-----	90	100	85	Ponderosa pine
Driscoll-----	Ponderosa pine-----	80	100	69	Ponderosa pine
400: Driscoll-----	Ponderosa pine-----	80	100	69	Ponderosa pine

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
500:					
Hobo-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	86	50	125	grand fir,
	Western white pine--	77	50	148	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock-----	---	100	---	hemlock
Threebear-----	Rocky Mountain				Lodgepole pine,
	Douglas-fir-----	76	50	93	Rocky Mountain
	Lodgepole pine-----	---	100	---	Douglas-fir,
	Western larch-----	80	50	122	western larch,
	Grand fir-----	88	50	129	grand fir,
	Western white pine--	76	50	146	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock-----	106	100	153	hemlock
501:					
Hobo, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	83	50	111	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	76	50	113	grand fir,
	Grand fir-----	80	50	114	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Threebear, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	83	50	111	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	92	50	146	grand fir,
	Grand fir-----	83	50	120	western white
	Western white pine--	84	50	162	pine, western red
	Western red cedar---	---	100	---	cedar
510:					
Honeyjones-----	Rocky Mountain				Rocky Mountain
	Douglas fir-----	81	50	106	Douglas fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	86	50	125	grand fir,
	Western white pine--	61	50	120	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock-----	103	100	147	hemlock
Ahrs-----	Ponderosa pine-----	105	100	112	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	80	50	103	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	64	50	89	western larch,
	Grand fir-----	81	50	116	western white pine
	Western white pine--	---	50	---	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
600:					
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	74	50	88	
	Lodgepole pine-----	---	100	---	
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
Huckle-----	Rocky Mountain				Rocky Mountain Douglas fir, western larch, grand fir, western white pine, western red cedar
	Douglas-fir-----	87	50	121	
	Lodgepole pine-----	---	100	---	
	Western larch-----	74	50	109	
	Grand fir-----	88	50	129	
	Western white pine--	---	50	---	
	Western red cedar---	---	100	---	
601:					
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	74	50	88	
	Lodgepole pine-----	---	100	---	
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
McCrosket-----	Ponderosa pine-----	97	100	97	Ponderosa pine, Rocky Mountain Douglas-fir
	Rocky Mountain				
	Douglas fir-----	76	50	93	
605:					
Benewah-----	Ponderosa pine-----	105	100	112	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	80	50	103	
	Lodgepole pine-----	---	100	---	
	Western larch-----	71	50	103	
	Grand fir-----	---	50	---	
Rasser-----	Ponderosa pine-----	86	100	78	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	63	50	63	
	Lodgepole pine-----	---	100	---	
	Western larch-----	---	50	---	
	Grand fir-----	105	50	163	
606:					
Benewah-----	Ponderosa pine-----	105	100	112	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	80	50	103	
	Lodgepole pine-----	---	100	---	
	Western larch-----	71	50	103	
	Grand fir-----	---	50	---	
Rasser-----	Ponderosa pine-----	86	100	78	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain				
	Douglas-fir-----	63	50	63	
	Lodgepole pine-----	---	100	---	
	Western larch-----	---	50	---	
	Grand fir-----	105	50	163	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
613:					
Ardenvoir, dry-----	Ponderosa pine-----	84	100	75	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	72	50	83	Douglas-fir
Lotuspoint-----	Ponderosa pine-----	69	100	54	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	71	50	81	Douglas-fir
614:					
Ardenvoir, dry-----	Ponderosa pine-----	84	100	75	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	72	50	83	Douglas-fir
Lotuspoint-----	Ponderosa pine-----	69	100	54	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	71	50	81	Douglas-fir
621:					
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
625:					
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
650:					
Grangemont-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	---	50	---	grand fir,
	Western white pine--	---	50	---	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock----	---	100	---	hemlock

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
651: Kingspeak-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- --- --- ---	50 100 50 50 50 100	--- --- --- --- --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
Shayhill, stony surface	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- 95 73 ---	50 100 50 50 50 100	--- --- --- 143 141 ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
652: Kingspeak-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- --- --- ---	50 100 50 50 50 100	--- --- --- --- --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
653: Kingspeak, cool-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar--- Western hemlock----	--- --- --- 91 73 --- 120	50 100 50 50 50 100 100	--- --- --- 135 141 --- 180	Rocky Mountain Douglas-fir, lodgepole pine, western larch, grand fir, western white pine, western hemlock
655: Tigley, moist-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- --- --- ---	50 100 50 50 50 100	--- --- --- --- --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
656: Kingspeak, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	119 --- 76 --- 97 ---	100 --- 50 100 50 50	139 --- 93 --- 147 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
660: Threebear-----	Rocky Mountain				Lodgepole pine,
	Douglas-fir-----	76	50	93	Rocky Mountain
	Lodgepole pine-----	---	100	---	Douglas-fir,
	Western larch-----	80	50	122	western larch,
	Grand fir-----	88	50	129	grand fir,
	Western white pine--	76	50	146	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock----	106	100	153	hemlock
662: Threebear, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	83	50	111	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	92	50	146	grand fir,
	Grand fir-----	83	50	120	western white
	Western white pine--	84	50	162	pine, western red
	Western red cedar---	---	100	---	cedar
663: Threebear, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	83	50	111	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	92	50	146	grand fir,
	Grand fir-----	83	50	120	western white
	Western white pine--	84	50	162	pine, western red
	Western red cedar---	---	100	---	cedar
Porrett.					
665: Grangemont, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	70	50	79	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	83	50	120	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
670: Honeyjones, warm-----	Rocky Mountain				Rocky Mountain
	Douglas fir-----	72	50	83	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	61	50	83	grand fir,
	Grand fir-----	84	50	122	western white
	Western white pine--	---	50	---	pine, western
	Western red cedar---	---	100	---	redcedar
671: Honeyjones-----	Rocky Mountain				Rocky Mountain
	Douglas fir-----	81	50	106	Douglas fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	86	50	125	grand fir,
	Western white pine--	61	50	120	western white
	Western red cedar---	---	100	---	pine, western
	Western hemlock----	103	100	147	hemlock

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
680:					
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
681:					
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Ahrs-----	Ponderosa pine-----	105	100	112	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	80	50	103	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	64	50	89	western larch,
	Grand fir-----	81	50	116	western white pine
	Western white pine--	---	50	---	
700:					
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
701:					
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
701: McCrosket-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	97 76	100 50	97 93	Ponderosa pine, Rocky Mountain Douglas-fir
703: Ardenvoir, dry-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	84 72	100 50	75 83	Ponderosa pine, Rocky Mountain Douglas-fir
Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
704: Ardenvoir, dry-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	84 72	100 50	75 83	Ponderosa pine, Rocky Mountain Douglas-fir
Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
705: Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
Rasser-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	86 63 --- --- 105	100 50 100 50 50	78 63 --- --- 163	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
706: Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
707: Huckle, dry-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- --- --- --- --- --- ---	100 50 100 50 50 50	--- --- --- --- --- ---	Ponderosa pine, Rocky Mountain Douglas fir, lodgepole pine, western larch, western white pine
Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 --- 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
710: McCrosket-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	97 --- 76	100 50	97 93	Ponderosa pine, Rocky Mountain Douglas-fir
Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 --- 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
711: McCrosket-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	97 --- 76	100 50	97 93	Ponderosa pine, Rocky Mountain Douglas-fir
Ardenvoir-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	110 --- 74 --- 65 72	100 50 100 50 50	122 88 --- 91 98	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
712: McCrosket-----	Ponderosa pine----- Rocky Mountain Douglas fir-----	97 --- 76	100 50	97 93	Ponderosa pine, Rocky Mountain Douglas-fir
Tekoa.					
716: Ahrs-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	105 --- 80 --- 64 81 ---	100 50 100 50 50 50	112 103 --- 89 116 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
720:					
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
721:					
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
735:					
Lotuspoint, stony	Ponderosa pine-----	69	100	54	Ponderosa pine,
surface-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	71	50	81	Douglas-fir
736:					
Lotuspoint, stony	Ponderosa pine-----	69	100	54	Ponderosa pine,
surface-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	71	50	81	Douglas-fir
Rock outcrop.					
756:					
Tigley-----	Ponderosa pine-----	---	100	---	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas fir-----	82	50	108	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch
	Grand fir-----	83	50	120	
	Western white pine--	---	50	---	
757:					
Hugus, warm-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	79	50	101	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	90	50	133	western white
	Western white pine--	---	50	---	pine, western red
	Western redcedar---	---	100	---	cedar

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
758: Tigley, moist-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- --- --- ---	50 100 50 50 50 100	--- --- --- --- --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
Hugus-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western redcedar--- Western hemlock----	--- --- --- 83 82 --- ---	50 100 50 50 50 100 100	--- --- --- 120 158 --- ---	Rocky Mountain Douglas-fir, lodgepole pine, western larch, grand fir, western white pine, western hemlock
765: Saint Maries-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	--- --- --- --- --- ---	50 100 50 50 50 100	--- --- --- --- --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
Huckle-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	87 --- 74 88 --- ---	50 100 50 50 50 100	121 --- 109 129 --- ---	Rocky Mountain Douglas fir, western larch, grand fir, western white pine, western red cedar
770: Pinecreek-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	103 --- 71	100 50	108 81	Ponderosa pine, Rocky Mountain Douglas-fir
771: Honeyjones, warm-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	72 --- 61 84 --- ---	50 100 50 50 50 100	83 --- 83 122 --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western redcedar
772: Honeyjones, warm-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	72 --- 61 84 --- ---	50 100 50 50 50 100	83 --- 83 122 --- ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western redcedar

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
772: Ahhs-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	105 80 --- 64 81 ---	100 50 100 50 50	112 103 --- 89 116 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
773: Honeyjones, dry-----	Ponderosa pine----- Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	--- 79 --- 62 76 ---	100 50 100 50 50 50	--- 101 --- 85 106 ---	Ponderosa pine, Rocky Mountain Douglas fir, lodgepole pine, western larch
774: Pinecreek, moist-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	113 84 --- 66 90	100 50 100 50 50	128 113 --- 93 133	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
775: Pinecreek, moist-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir-----	113 84 --- 66 90	100 50 100 50 50	128 113 --- 93 133	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
776: Cassyhill-----	Ponderosa pine-----	64	100	50	Ponderosa pine
777: Boulder creek, warm-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar---	84 63 72 98 78 ---	50 100 50 50 50 100	113 52 105 149 150 ---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
778: Cassyhill-----	Ponderosa pine-----	64	100	50	Ponderosa pine
Lotuspoint-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	69 71	100 50	54 81	Ponderosa pine, Rocky Mountain Douglas-fir

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
779: Boulder creek-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	73	50	86	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	64	50	89	western larch,
	Grand fir-----	87	50	127	grand fir,
	Western white pine--	64	50	125	western white
	Western red cedar---	74	100	87	pine, western
	Western hemlock----	96	100	133	hemlock
780: Ardenvoir-----	Ponderosa pine-----	110	100	122	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	74	50	88	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch
	Western larch-----	65	50	91	
	Grand fir-----	72	50	98	
Huckle-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	87	50	121	Douglas fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	74	50	109	grand fir,
	Grand fir-----	88	50	129	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Saint Maries, dry-----	Ponderosa pine-----	---	100	---	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	lodgepole pine,
	Western larch-----	---	50	---	western larch,
	Grand fir-----	---	50	---	western white pine
	Western white pine--	---	50	---	
781: Ahrs, moist-----	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	---	50	---	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	---	50	---	grand fir,
	Grand fir-----	---	50	---	western white
	Western white pine--	---	50	---	pine, western red
	Western red cedar---	---	100	---	cedar
Honeyjones, warm-----	Rocky Mountain				Rocky Mountain
	Douglas fir-----	72	50	83	Douglas-fir,
	Lodgepole pine-----	---	100	---	western larch,
	Western larch-----	61	50	83	grand fir,
	Grand fir-----	84	50	122	western white
	Western white pine--	---	50	---	pine, western
	Western red cedar---	---	100	---	redcedar
782: Ardenvoir, dry-----	Ponderosa pine-----	84	100	75	Ponderosa pine,
	Rocky Mountain				Rocky Mountain
	Douglas-fir-----	72	50	83	Douglas-fir

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
782: Cassyhill-----	Ponderosa pine-----	64	100	50	Ponderosa pine
784: Pinecreek, moist-----	Ponderosa pine-----	113	100	128	Ponderosa pine, Rocky Mountain Douglas-fir, western larch
	Rocky Mountain Douglas-fir-----	84	50	113	
	Lodgepole pine-----	---	100	---	
	Western larch-----	66	50	93	
	Grand fir-----	90	50	133	
Lotuspoint-----	Ponderosa pine-----	69	100	54	Ponderosa pine, Rocky Mountain Douglas-fir
	Rocky Mountain Douglas-fir-----	71	50	81	
791: Latour-----	Rocky Mountain Douglas fir-----	---	50	---	Rocky Mountain Douglas fir, lodgepole pine, western larch, Engelmann spruce, western white pine
	Lodgepole pine-----	---	100	---	
	Western larch-----	---	50	---	
	Engelmann spruce----	---	100	---	
	subalpine fir-----	---	100	---	
	Western white pine--	---	50	---	
	mountain hemlock----	---	---	---	
802: Kingspeak-----	Rocky Mountain Douglas-fir-----	---	50	---	Rocky Mountain Douglas-fir, western larch, grand fir, western white pine, western red cedar
	Lodgepole pine-----	---	100	---	
	Western larch-----	---	50	---	
	Grand fir-----	---	50	---	
	Western white pine--	---	50	---	
	Western red cedar----	---	100	---	
Urban land.					
900: Water.					
902: Ahrs-----	Ponderosa pine-----	105	100	112	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
	Rocky Mountain Douglas-fir-----	80	50	103	
	Lodgepole pine-----	---	100	---	
	Western larch-----	64	50	89	
	Grand fir-----	81	50	116	
	Western white pine--	---	50	---	
903: Ahrs-----	Ponderosa pine-----	105	100	112	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
	Rocky Mountain Douglas-fir-----	80	50	103	
	Lodgepole pine-----	---	100	---	
	Western larch-----	64	50	89	
	Grand fir-----	81	50	116	
	Western white pine--	---	50	---	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
903: Pinecreek-----	Ponderosa pine----- Rocky Mountain Douglas-fir-----	103 71	100 50	108 81	Ponderosa pine, Rocky Mountain Douglas-fir
907: Honeyjones-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar--- Western hemlock-----	 81 --- --- 86 61 --- 103	 50 100 50 50 50 100 100	 106 --- --- 125 120 --- 147	Rocky Mountain Douglas fir, lodgepole pine, western larch, grand fir, western white pine, western hemlock
908: Honeyjones-----	Rocky Mountain Douglas fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar--- Western hemlock-----	 81 --- --- 86 61 --- 103	 50 100 50 50 50 100 100	 106 --- --- 125 120 --- 147	Rocky Mountain Douglas fir, lodgepole pine, western larch, grand fir, western white pine, western hemlock
Ahrs-----	Ponderosa pine----- Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine--	105 80 --- 64 81 ---	100 50 100 50 50 50	112 103 --- 89 116 ---	Ponderosa pine, Rocky Mountain Douglas-fir, lodgepole pine, western larch, western white pine
913: Hobo-----	Rocky Mountain Douglas-fir----- Lodgepole pine----- Western larch----- Grand fir----- Western white pine-- Western red cedar--- Western hemlock-----	 --- --- --- 86 77 --- ---	 50 100 50 50 100 100	 --- --- --- 125 148 --- ---	Rocky Mountain Douglas fir, lodgepole pine, western larch, grand fir, western white pine, western hemlock
Ac1: Arson-----	Douglas-fir----- Grand fir----- Lodgepole pine----- Ponderosa pine----- Western larch-----	 --- --- --- --- ---	 	 --- --- --- --- ---	Douglas-fir, ponderosa pine, western larch
Carlinton-----	Douglas-fir----- Grand fir----- Lodgepole pine----- Ponderosa pine----- Western larch-----	79 78 --- 104 ---	50 50 100 100 50	79 110 --- 110 ---	Douglas-fir, ponderosa pine, western larch

Soil Survey of Benewah County Area, Idaho, Western Part

Table 13.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site base age	Volume of wood fiber (CMAI)	
		<i>Ft</i>	<i>Yrs</i>	<i>Cu ft/ac/yr</i>	
Ac2:					
Arson, dry-----	Douglas-fir-----	---		---	Ponderosa pine,
	Ponderosa pine-----	---		---	Rocky Mountain
					Douglas-fir
Carlinton, dry-----	Douglas-fir-----	---		---	Ponderosa pine,
	Ponderosa pine-----	---		---	Rocky Mountain
					Douglas-fir
An4:					
Arson, dry-----	Douglas-fir-----	---		---	Ponderosa pine,
	Ponderosa pine-----	---		---	Rocky Mountain
					Douglas-fir
Minaloosa, dry-----	Douglas-fir-----	---		---	Ponderosa pine,
	Ponderosa pine-----	---		---	Rocky Mountain
					Douglas-fir
Rs2:					
Reggear, moist-----	Douglas-fir-----	85	50	92	Douglas-fir, grand
	Engelmann spruce----	---		---	fir, western
	Grand fir-----	87	50	127	larch, western
	Lodgepole pine-----	---		---	redcedar, western
	Western larch-----	---		---	white pine
	Western red cedar----	---		---	
	Western white pine--	---		---	
Stewah-----	Douglas-fir-----	90	50	104	Douglas-fir, grand
	Engelmann spruce----	---	100	---	fir, western
	Grand fir-----	79	50	112	larch, western
	Lodgepole pine-----	---	100	---	redcedar, western
	Western larch-----	70	50	100	white pine
	Western red cedar----	---	100	---	
	Western white pine--	---	50	---	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Moderate Flooding Low strength Dusty	0.50 0.50 0.03	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
Typic Fluvaquents, protected-----	40	Moderate Wetness Flooding Low strength Dusty	0.50 0.50 0.50 0.03	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
116: Thatuna-----	45	Moderate Low strength Dusty	0.50 0.25	Moderately suited Low strength	0.50	Severe Low strength	1.00
Caldwell-----	35	Severe Flooding Low strength Dusty	1.00 0.50 0.25	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
118: Thatuna-----	50	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength	0.50	Severe Low strength	1.00
Cald-----	30	Severe Flooding Low strength Dusty	1.00 0.50 0.22	Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
120: Latahco-----	80	Moderate Flooding Low strength Dusty	0.50 0.50 0.07	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
121: Latahco-----	60	Moderate Flooding Low strength Dusty	0.50 0.50 0.07	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
Lovell-----	30	Moderate Flooding Low strength Dusty	0.50 0.50 0.07	Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
122: Tilma-----	45	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
Latah-----	40	Severe Flooding Low strength Dusty	1.00 0.50 0.22	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
124: Caldwell-----	60	Severe Flooding Low strength Dusty	1.00 0.50 0.25	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
Cald-----	25	Severe Flooding Low strength Dusty	1.00 0.50 0.25	Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
125: Lovell-----	55	Moderate Flooding Low strength Dusty	0.50 0.50 0.02	Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Porrett-----	20	Severe Flooding Low strength Dusty	1.00 0.50 0.02	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength	1.00
Aquandic Endoaquepts	15	Severe Flooding Low strength Dusty	1.00 0.50 0.02	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
130: Porrett-----	80	Severe Flooding Low strength Dusty	1.00 0.50 0.01	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength	1.00
136: Lovell-----	45	Moderate Flooding Low strength Dusty	0.50 0.50 0.02	Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Porrett-----	40	Severe Flooding Low strength Dusty	1.00 0.50 0.02	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength	1.00
141: Miesen-----	80	Moderate Flooding Low strength Dusty	0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142: Miesen-----	45	Moderate Flooding Low strength Dusty	0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
Ramsdell-----	40	Severe Flooding Wetness Low strength Dusty	1.00 1.00 0.50 0.04	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
143: Miesen, protected, drained-----	80	Moderate Flooding Low strength Dusty	0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
144: Miesen, protected, drained-----	50	Moderate Flooding Low strength Dusty	0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
Ramsdell, protected, drained	35	Severe Wetness Flooding Low strength Dusty	1.00 0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
145: Bellslake, protected, drained	80	Severe Flooding Wetness Low strength Dusty	1.00 1.00 0.50 0.03	Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
150: Pywell, protected, drained-----	80	Severe Flooding Low strength Wetness Dusty	1.00 1.00 1.00 0.03	Poorly suited Low strength Flooding Wetness	1.00 1.00 0.50	Severe Low strength	1.00
155: Ramsdell-----	80	Severe Flooding Wetness Low strength Dusty	1.00 1.00 0.50 0.04	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
156: Ramsdell, protected, drained	80	Severe Wetness Flooding Low strength Dusty	1.00 0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
157: Ramsdell, protected, drained	50	Severe Wetness Flooding Low strength Dusty	1.00 0.50 0.50 0.04	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
DeVoignes, protected, drained	30	Severe Flooding Wetness Low strength Dusty	1.00 1.00 0.50 0.04	Poorly suited Low strength Flooding Wetness	1.00 1.00 0.50	Severe Low strength	1.00
158: DeVoignes-----	45	Severe Flooding Wetness Low strength Dusty	1.00 1.00 0.50 0.04	Poorly suited Low strength Ponding Flooding Wetness	1.00 1.00 1.00 1.00	Severe Low strength	1.00
Pywell-----	40	Severe Flooding Low strength Wetness Dusty	1.00 1.00 1.00 0.04	Poorly suited Low strength Ponding Flooding Wetness	1.00 1.00 1.00 1.00	Severe Low strength Wetness	1.00 0.50
200: Blinn, stony surface	80	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
201: Blinn, stony surface	80	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
202: Blinn, stony surface	55	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Bobbitt, stony surface-----	30	Severe Slope Low strength Dusty	1.00 0.50 0.08	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
210: Agatha, stony surface-----	80	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.03	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
212: Agatha, stony surface-----	80	Severe Slope Dusty	1.00 0.03	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
230: Lacy, stony surface	65	Severe Restrictive layer Slope Dusty	1.00 0.50 0.10	Poorly suited Slope Low strength	1.00 0.50	Moderate Low strength	0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Severe Slope Low strength Dusty	1.00 0.50 0.07	Poorly suited Slope	1.00	Severe Low strength	1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Severe Restrictive layer Slope Dusty	1.00 0.50 0.10	Poorly suited Slope Low strength	1.00 0.50	Moderate Low strength	0.50
Bobbitt, stony surface-----	30	Severe Restrictive layer Slope Dusty	1.00 0.50 0.10	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
233: Lacy, very stony surface-----	55	Severe Slope Low strength Dusty	1.00 0.50 0.07	Poorly suited Slope	1.00	Severe Low strength	1.00
Bobbitt, very stony surface-----	30	Severe Slope Low strength Dusty	1.00 0.50 0.07	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
250: Dorb, warm, stony surface-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255: Shayhill, stony surface-----	80	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
256: Shayhill, stony surface-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
257: Shayhill, dry, stony surface-----	80	Severe Slope Dusty	1.00 0.03	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
260: Seddow-----	80	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
261: Sly, dry-----	45	Severe Slope Low strength Dusty	1.00 0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Shayhill, dry-----	40	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
262: Seddow-----	45	Severe Slope Low strength Dusty	1.00 0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Sly, dry-----	40	Severe Slope Low strength Dusty	1.00 0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
300: Taney-----	80	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
301: Taney-----	80	Moderate Low strength Dusty	0.50 0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Slight Dusty	0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Benewah-----	40	Moderate Low strength Dusty	0.50 0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
304: Benewah-----	45	Moderate Slope Dusty	0.50 0.03	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Santa-----	35	Slight Dusty	0.03	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
310: Santa-----	80	Slight Dusty	0.04	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
311: Santa-----	80	Slight Dusty	0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
314: Sharptop-----	45	Slight Dusty	0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Santa-----	40	Slight Dusty	0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
315: Setters-----	80	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
316: Setters-----	50	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Taney-----	30	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Wetness Slope	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
320: Reggear-----	80	Moderate Low strength Dusty	0.50 0.02	Moderately suited Low strength Wetness Slope	0.50 0.50 0.50	Severe Low strength	1.00
321: Reggear, moist-----	80	Slight Dusty	0.01	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
322: Reggear, moist-----	50	Slight Dusty	0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Sly-----	30	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
323: Bechtel-----	50	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Reggear-----	35	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
325: Reggear-----	55	Moderate Low strength Dusty	0.50 0.02	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
Sharptop, basalt substratum-----	30	Slight Dusty	0.02	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
326: Reggear-----	50	Moderate Low strength Dusty	0.50 0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Seddow-----	35	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
330: Carlinton-----	50	Slight Dusty	0.04	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
330: Carlinton, dry-----	30	Slight Dusty	0.04	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
335: Carlinton, dry-----	80	Slight Dusty	0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
336: Carlinton, dry-----	55	Slight Dusty	0.04	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
Taney-----	25	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
340: Arson-----	45	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Lotuspoint-----	35	Severe Restrictive layer Slope Dusty	1.00 0.50 0.05	Poorly suited Slope	1.00	Slight Strength	0.10
341: Sinkler-----	45	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Arson-----	40	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
342: Sinkler, dry-----	45	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Arson, dry-----	40	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
350: Southwick-----	80	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
351: Southwick-----	80	Moderate Low strength Dusty	0.50 0.19	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
353: Tensed-----	50	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
Pedee-----	35	Moderate Low strength Dusty	0.50 0.04	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
354: Tensed-----	50	Moderate Slope Dusty	0.50 0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Pedee-----	35	Moderate Slope Dusty	0.50 0.04	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
355: Southwick-----	55	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
Driscoll-----	30	Slight Dusty	0.19	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
356: Southwick-----	55	Moderate Slope Dusty	0.50 0.19	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Driscoll-----	30	Moderate Slope Stickiness/slope Dusty	0.50 0.50 0.19	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
360: Larkin-----	80	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
361: Larkin-----	80	Moderate Slope Dusty	0.50 0.19	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
363: Larkin-----	55	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
Driscoll-----	30	Slight Dusty	0.19	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
364: Larkin-----	50	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
Southwick-----	35	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
367: Larkin-----	55	Moderate Slope Dusty	0.50 0.19	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Driscoll-----	30	Moderate Slope Stickiness/slope Dusty	0.50 0.50 0.19	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
400: Driscoll-----	80	Slight Dusty	0.19	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
405: Thatuna-----	45	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Naff-----	40	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
406: Thatuna-----	50	Severe Slope Low strength Dusty	1.00 0.50 0.22	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Naff-----	40	Moderate Slope Dusty	0.50 0.22	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
410: Palouse-----	50	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
Naff-----	35	Moderate Low strength Dusty	0.50 0.19	Moderately suited Low strength	0.50	Severe Low strength	1.00
411: Palouse-----	80	Moderate Low strength Dusty	0.50 0.19	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
414: Naff-----	45	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength	0.50	Severe Low strength	1.00
Thatuna-----	40	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength	0.50	Severe Low strength	1.00
415: Naff-----	50	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
Tilma-----	35	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
416: Naff-----	45	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Thatuna-----	40	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
417: Naff-----	45	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Palouse-----	40	Moderate Slope Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
420: Garfield-----	45	Moderate Slope Dusty	0.50 0.22	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
Tilma-----	35	Moderate Low strength Dusty	0.50 0.22	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
421: Naff-----	55	Moderate Low strength Dusty	0.50 0.22	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Garfield-----	30	Moderate Slope Dusty	0.50 0.22	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
500: Hobo-----	50	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
500: Threebear-----	35	Moderate Low strength Dusty	0.50 0.02	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
501: Hobo, warm-----	45	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
Threebear, warm----	40	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
510: Honeyjones-----	45	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ahrs-----	35	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
600: Ardenvoir-----	50	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Huckle-----	35	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
601: Ardenvoir-----	55	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
McCrosket-----	25	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope	1.00	Slight Strength	0.10
605: Benewah-----	45	Moderate Low strength Dusty	0.50 0.03	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50	Severe Low strength	1.00
Rasser-----	35	Moderate Low strength Dusty	0.50 0.03	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
606: Benewah-----	45	Moderate Slope Dusty	0.50 0.03	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
606: Rasser-----	40	Moderate Slope Dusty	0.50 0.03	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
610: Schumacher-----	80	Moderate Low strength Dusty	0.50 0.14	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
611: Schumacher-----	45	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.15	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Tekoa-----	40	Severe Slope Dusty	1.00 0.15	Poorly suited Slope	1.00	Slight Strength	0.10
612: Libertybutte-----	45	Severe Restrictive layer Slope Dusty	1.00 0.50 0.17	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Tekoa-----	40	Moderate Restrictive layer Slope Dusty	0.50 0.50 0.17	Poorly suited Slope	1.00	Slight Strength	0.10
613: Ardenvoir, dry-----	50	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Lotuspoint-----	35	Severe Restrictive layer Slope Dusty	1.00 0.50 0.05	Moderately suited Slope	0.50	Slight Strength	0.10
614: Ardenvoir, dry-----	50	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Lotuspoint-----	35	Severe Slope Dusty	1.00 0.05	Poorly suited Slope	1.00	Slight Strength	0.10
617: Tekoa-----	80	Moderate Slope Restrictive layer Dusty	0.50 0.50 0.15	Poorly suited Slope	1.00	Slight Strength	0.10
621: Huckle-----	80	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
625: Huckle-----	45	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ardenvoir-----	40	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
650: Grangemont-----	80	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
651: Kingspeak-----	55	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Shayhill, stony surface-----	30	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
652: Kingspeak-----	80	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
653: Kingspeak, cool----	80	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
655: Tigley, moist-----	80	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
656: Kingspeak, dry-----	80	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
660: Threebear-----	80	Moderate Low strength Dusty	0.50 0.01	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
662: Threebear, warm----	80	Moderate Low strength Dusty	0.50 0.01	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
663: Threebear, warm----	50	Moderate Low strength Dusty	0.50 0.01	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
663: Porrett-----	35	Severe Flooding Low strength Dusty	1.00 0.50 0.01	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength	1.00
665: Grangemont, warm----	80	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
670: Honeyjones, warm----	80	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
671: Honeyjones-----	80	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
680: Ardenvoir-----	45	Moderate Slope Dusty	0.50 0.01	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
Huckle-----	40	Moderate Slope Dusty	0.50 0.01	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
681: Huckle-----	45	Moderate Slope Dusty	0.50 0.01	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
Ahrs-----	35	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope	0.50	Slight Strength	0.10
700: Ardenvoir-----	50	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Huckle-----	35	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
701: Ardenvoir-----	55	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
McCrosket-----	25	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
703: Ardenvoir, dry-----	45	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ardenvoir-----	40	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
704: Ardenvoir, dry-----	45	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ardenvoir-----	40	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
705: Ardenvoir-----	50	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Rasser-----	30	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
706: Ardenvoir-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
707: Huckle, dry-----	50	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ardenvoir-----	35	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
710: McCrosket-----	50	Moderate Slope Dusty	0.50 0.01	Moderately suited Slope	0.50	Slight Strength	0.10
Ardenvoir-----	30	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
711: McCrosket-----	50	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
Ardenvoir-----	30	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
712: McCrosket-----	50	Severe Slope Dusty	1.00 0.05	Poorly suited Slope	1.00	Slight Strength	0.10
Tekoa-----	30	Severe Slope Dusty	1.00 0.12	Poorly suited Slope	1.00	Slight Strength	0.10
716: Ahns-----	80	Moderate Slope Dusty	0.50 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
720: Huckle-----	80	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
721: Huckle-----	50	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ardenvoir-----	35	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
735: Lotuspoint, stony surface-----	80	Severe Slope Dusty	1.00 0.04	Poorly suited Slope	1.00	Slight Strength	0.10
736: Lotuspoint, stony surface-----	65	Severe Slope Dusty	1.00 0.03	Poorly suited Slope	1.00	Slight Strength	0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
757: Hugus, warm-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
758: Tigley, moist-----	50	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
758: Hugus-----	35	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
765: Saint Maries-----	45	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
Huckle-----	35	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
770: Pinecreek-----	80	Severe Slope Dusty	1.00 0.02	Poorly suited Slope	1.00	Slight Strength	0.10
771: Honeyjones, warm----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
772: Honeyjones, warm----	45	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ahrs-----	35	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
773: Honeyjones, dry-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
774: Pinecreek, moist----	80	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
775: Pinecreek, moist----	80	Severe Slope Dusty	1.00 0.02	Poorly suited Slope	1.00	Slight Strength	0.10
776: Cassyhill-----	80	Severe Slope Dusty	1.00 0.05	Poorly suited Slope	1.00	Slight Strength	0.10
777: Boulder creek, warm--	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
778: Cassyhill-----	50	Severe Restrictive layer Slope Dusty	1.00 0.50 0.05	Moderately suited Slope	0.50	Slight Strength	0.10
Lotuspoint-----	35	Severe Restrictive layer Slope Dusty	1.00 0.50 0.05	Moderately suited Slope	0.50	Slight Strength	0.10
779: Boulder creek-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
780: Ardenvoir-----	30	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Huckle-----	30	Severe Slope Low strength Dusty	1.00 0.50 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Saint Maries, dry---	30	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
781: Ahrs, moist-----	45	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
Honeyjones, warm----	35	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
782: Ardenvoir, dry-----	45	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Cassyhill-----	35	Severe Slope Dusty	1.00 0.05	Poorly suited Slope	1.00	Slight Strength	0.10
784: Pinecreek, moist----	45	Severe Slope Dusty	1.00 0.02	Poorly suited Slope	1.00	Slight Strength	0.10
Lotuspoint-----	35	Severe Slope Dusty	1.00 0.04	Poorly suited Slope	1.00	Slight Strength	0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
791: Latour-----	80	Severe Slope	1.00	Poorly suited Slope	1.00	Slight Strength	0.10
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Severe Flooding Low strength Dusty	1.00 0.50 0.02	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
Aquic Udifluvents---	40	Moderate Flooding Low strength Dusty	0.50 0.50 0.02	Moderately suited Low strength Flooding	0.50 0.50	Severe Low strength	1.00
902: Ahrs-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
903: Ahrs-----	50	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
Pinecreek-----	30	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10
907: Honeyjones-----	80	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
908: Honeyjones-----	45	Severe Slope Dusty	1.00 0.01	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Ahrs-----	35	Severe Slope Dusty	1.00 0.01	Poorly suited Slope	1.00	Slight Strength	0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 14.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
913: Hobo-----	85	Moderate Slope Dusty	0.50 0.02	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
Ac1: Arson-----	40	Moderate Slope Dusty	0.50 0.04	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Carlinton-----	35	Moderate Slope Dusty	0.50 0.02	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Ac2: Arson, dry-----	45	Moderate Slope Dusty	0.50 0.05	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Carlinton, dry-----	30	Moderate Slope Dusty	0.50 0.03	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
An4: Arson, dry-----	55	Severe Slope Dusty	1.00 0.03	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Minaloosa, dry-----	20	Severe Slope Dusty	1.00 0.02	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00
Rs2: Reggear, moist-----	40	Moderate Slope Dusty	0.50 0.03	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Stewah-----	25	Moderate Slope Dusty	0.50 0.03	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.---Hazard of Erosion and Suitability for Roads on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
Typic Fluvaquents, protected-----	40	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
116: Thatuna-----	45	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Caldwell-----	35	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
118: Thatuna-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Cald-----	30	Slight		Slight		Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50
120: Latahco-----	80	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
121: Latahco-----	60	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
Lovell-----	30	Slight		Slight		Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50
122: Tilma-----	45	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
Latah-----	40	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124: Caldwell-----	60	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
Cald-----	25	Slight		Slight		Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50
125: Lovell-----	55	Slight		Slight		Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50
Porrett-----	20	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
Aquandic Endoaquepts	15	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
130: Porrett-----	80	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
136: Lovell-----	45	Slight		Slight		Moderately suited Low strength Flooding Wetness	0.50 0.50 0.50
Porrett-----	40	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
141: Miesen-----	80	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
142: Miesen-----	45	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
Ramsdell-----	40	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
143: Miesen, protected, drained-----	80	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
144: Miesen, protected, drained-----	50	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
Ramsdell, protected, drained	35	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
145: Bellslake, protected, drained	80	Slight		Slight		Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50
150: Pywell, protected, drained-----	80	Slight		Slight		Poorly suited Low strength Flooding Wetness	1.00 1.00 0.50
155: Ramsdell-----	80	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
156: Ramsdell, protected, drained	80	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
157: Ramsdell, protected, drained	50	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
DeVoignes, protected, drained	30	Slight		Slight		Poorly suited Low strength Flooding Wetness	1.00 1.00 0.50
158: DeVoignes-----	45	Slight		Slight		Poorly suited Low strength Ponding Flooding Wetness	1.00 1.00 1.00 1.00
Pywell-----	40	Slight		Slight		Poorly suited Low strength Ponding Flooding Wetness	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
200: Blinn, stony surface	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
201: Blinn, stony surface	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
202: Blinn, stony surface	55	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Bobbitt, stony surface-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
210: Agatha, stony surface-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
212: Agatha, stony surface-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
230: Lacy, stony surface	65	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Bobbitt, stony surface-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233: Lacy, very stony surface-----	55	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Bobbitt, very stony surface-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
250: Dorb, warm, stony surface-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
255: Shayhill, stony surface-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
256: Shayhill, stony surface-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
257: Shayhill, dry, stony surface-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
260: Seddow-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
261: Sly, dry-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Shayhill, dry-----	40	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
262: Seddow-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Sly, dry-----	40	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
300: Taney-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
301: Taney-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
303: Carlinton-----	45	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Benewah-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
304: Benewah-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Santa-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
310: Santa-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
311: Santa-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
314: Sharptop-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Santa-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
315: Setters-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
316: Setters-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
316: Taney-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Wetness Slope	0.50 0.50 0.50
320: Reggear-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Wetness Slope	0.50 0.50 0.50
321: Reggear, moist-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
322: Reggear, moist-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Sly-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
323: Bechtel-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Reggear-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
325: Reggear-----	55	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
Sharptop, basalt substratum-----	30	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
326: Reggear-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Seddow-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Low strength	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
330: Carlinton-----	50	Slight		Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
Carlinton, dry-----	30	Slight		Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
335: Carlinton, dry-----	80	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
336: Carlinton, dry-----	55	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
Taney-----	25	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
340: Arson-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Lotuspoint-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
341: Sinkler-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Arson-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
342: Sinkler, dry-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Arson, dry-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
350: Southwick-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
351: Southwick-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
353: Tensed-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
Pedee-----	35	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
354: Tensed-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Pedee-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
355: Southwick-----	55	Slight		Severe Slope/erodibility	0.95	Moderately suited Low strength Slope	0.50 0.50
Driscoll-----	30	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
356: Southwick-----	55	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Driscoll-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
360: Larkin-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
361: Larkin-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
363: Larkin-----	55	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Driscoll-----	30	Slight		Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
364: Larkin-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Southwick-----	35	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
367: Larkin-----	55	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Driscoll-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
400: Driscoll-----	80	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
405: Thatuna-----	45	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Naff-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
406: Thatuna-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Naff-----	40	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
410: Palouse-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Naff-----	35	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
411: Palouse-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
414: Naff-----	45	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Thatuna-----	40	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
415: Naff-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Slope	0.50 0.50
Tilma-----	35	Slight		Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
416: Naff-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Thatuna-----	40	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
417: Naff-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Palouse-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
420: Garfield-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Slope	0.50 0.50
Tilma-----	35	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
421: Naff-----	55	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Garfield-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Slope	0.50 0.50
500: Hobo-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
Threebear-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Hobo, warm-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50
Threebear, warm----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
510: Honeyjones-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Ahrs-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
600: Ardenvoir-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Huckle-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
601: Ardenvoir-----	55	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Low strength	1.00 0.50
McCrosket-----	25	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
605: Benewah-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Low strength Slope Wetness	0.50 0.50 0.50
Rasser-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
606: Benewah-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50
Rasser-----	40	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
610: Schumacher-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope Low strength	0.50 0.50

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Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
611: Schumacher-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Tekoa-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
612: Libertybutte-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Tekoa-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
613: Ardenvoir, dry-----	50	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Low strength	0.50 0.50
Lotuspoint-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
614: Ardenvoir, dry-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Lotuspoint-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
617: Tekoa-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
621: Huckle-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
625: Huckle-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Ardenvoir-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
650: Grangemont-----	80	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Low strength	0.50 0.50
651: Kingspeak-----	55	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
651: Shayhill, stony surface-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
652: Kingspeak-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
653: Kingspeak, cool-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
655: Tigley, moist-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
656: Kingspeak, dry-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
660: Threebear-----	80	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
662: Threebear, warm-----	80	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength Wetness	0.50 0.50 0.50
663: Threebear, warm-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
Porrett-----	35	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
665: Grangemont, warm-----	80	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Low strength	0.50 0.50
670: Honeyjones, warm-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
671: Honeyjones-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
680: Ardenvoir-----	45	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
Huckle-----	40	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
681: Huckle-----	45	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
Ahrs-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
700: Ardenvoir-----	50	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Huckle-----	35	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
701: Ardenvoir-----	55	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
McCrosket-----	25	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
703: Ardenvoir, dry-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Ardenvoir-----	40	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
704: Ardenvoir, dry-----	45	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Low strength	1.00 0.50
Ardenvoir-----	40	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
705: Ardenvoir-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Rasser-----	30	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
706: Ardenvoir-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
707: Huckle, dry-----	50	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Ardenvoir-----	35	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
710: McCrosket-----	50	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
Ardenvoir-----	30	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Low strength	1.00 0.50
711: McCrosket-----	50	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Ardenvoir-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
712: McCrosket-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Tekoa-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
716: Ahrs-----	80	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
720: Huckle-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
721: Huckle-----	50	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
721: Ardenvoir-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
735: Lotuspoint, stony surface-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
736: Lotuspoint, stony surface-----	65	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
757: Hugus, warm-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
758: Tigley, moist-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Hugus-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
765: Saint Maries-----	45	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Huckle-----	35	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
770: Pinecreek-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
771: Honeyjones, warm----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
772: Honeyjones, warm----	45	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Ahrs-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
773: Honeyjones, dry-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
774: Pinecreek, moist----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
775: Pinecreek, moist----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
776: Cassychill-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
777: Boulder creek, warm--	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
778: Cassychill-----	50	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
Lotuspoint-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
779: Boulder creek-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
780: Ardenvoir-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Huckle-----	30	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Saint Maries, dry---	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
781: Ahrs, moist-----	45	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Honeyjones, warm----	35	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
782: Ardenvoir, dry-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
782: Cassymill-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
784: Pinecreek, moist----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Lotuspoint-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
791: Latour-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
Aquic Udifluvents---	40	Slight		Slight		Moderately suited Low strength Flooding	0.50 0.50
902: Ahrs-----	80	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
903: Ahrs-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Pinecreek-----	30	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
907: Honeyjones-----	80	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
908: Honeyjones-----	45	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 15.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
908: Ahrs-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
913: Hobo-----	85	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength Wetness	1.00 0.50 0.50
Ac1: Arson-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Carlinton-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Ac2: Arson, dry-----	45	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Carlinton, dry-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
An4: Arson, dry-----	55	Very severe Slope/erodibility	0.95	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Minaloosa, dry-----	20	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Rs2: Reggear, moist-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Stewah-----	25	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Well suited		Moderately suited Rock fragments	0.50	Moderately suited Low strength Dusty	0.50 0.03
Typic Fluvaquents, protected-----	40	Well suited		Well suited		Moderately suited Wetness Low strength Dusty	0.50 0.50 0.03
116: Thatuna-----	45	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.25
Caldwell-----	35	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.25
118: Thatuna-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Cald-----	30	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.22
120: Latahco-----	80	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.07
121: Latahco-----	60	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.07
Lovell-----	30	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.07
122: Tilma-----	45	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.22
Latah-----	40	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124: Caldwell-----	60	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.25
Cald-----	25	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.25
125: Lovell-----	55	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
Porrett-----	20	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
Aquandic Endoaquepts	15	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
130: Porrett-----	80	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.01
136: Lovell-----	45	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
Porrett-----	40	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
141: Miesen-----	80	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.04
142: Miesen-----	45	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.04
Ramsdell-----	40	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.04
143: Miesen, protected, drained-----	80	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.04

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Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
144: Miesen, protected, drained-----	50	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.04
Ramsdell, protected, drained	35	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.04
145: Bellslake, protected, drained	80	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.03
150: Pywell, protected, drained-----	80	Well suited		Well suited		Poorly suited Low strength Wetness Dusty	1.00 1.00 0.03
155: Ramsdell-----	80	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.04
156: Ramsdell, protected, drained	80	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.04
157: Ramsdell, protected, drained	50	Well suited		Well suited		Poorly suited Wetness Low strength Dusty	1.00 0.50 0.04
DeVoignes, protected, drained	30	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Poorly suited Low strength Wetness Dusty	1.00 1.00 0.04
158: DeVoignes-----	45	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Poorly suited Low strength Wetness Dusty	1.00 1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158: Pywell-----	40	Moderately suited Wetness	0.50	Moderately suited Wetness	0.50	Poorly suited Low strength Wetness Dusty	1.00 1.00 0.04
200: Blinn, stony surface	80	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
201: Blinn, stony surface	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
202: Blinn, stony surface	55	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Bobbitt, stony surface-----	30	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Low strength Dusty	1.00 0.50 0.08
210: Agatha, stony surface-----	80	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03
212: Agatha, stony surface-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.03
230: Lacy, stony surface	65	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.07
Rock outcrop-----	25	Not rated		Not rated		Not rated	

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Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
232: Lacy, stony surface	55	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.10
Bobbitt, stony surface-----	30	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.10
233: Lacy, very stony surface-----	55	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.07
Bobbitt, very stony surface-----	30	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.07
250: Dorb, warm, stony surface-----	80	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.01
255: Shayhill, stony surface-----	80	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02
256: Shayhill, stony surface-----	80	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
257: Shayhill, dry, stony surface-----	80	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Slope Low strength Dusty	0.50 0.50 0.03
260: Seddow-----	80	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02

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Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
261: Sly, dry-----	45	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Shayhill, dry-----	40	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
262: Seddow-----	45	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Sly, dry-----	40	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
300: Taney-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
301: Taney-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
303: Carlinton-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
Benewah-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
304: Benewah-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.03
Santa-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.03
310: Santa-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
311: Santa-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
314: Sharptop-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
Santa-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
315: Setters-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
316: Setters-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
Taney-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
320: Reggear-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
321: Reggear, moist-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
322: Reggear, moist-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
Sly-----	30	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
323: Bechtel-----	50	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02
Reggear-----	35	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
325: Reggear-----	55	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325: Sharptop, basalt substratum-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
326: Reggear-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
Seddow-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
330: Carlinton-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
Carlinton, dry-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
335: Carlinton, dry-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
336: Carlinton, dry-----	55	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
Taney-----	25	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.04
340: Arson-----	45	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02
Lotuspoint-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 1.00	Moderately suited Slope Dusty	0.50 0.05
341: Sinkler-----	45	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Arson-----	40	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
342: Sinkler, dry-----	45	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Arson, dry-----	40	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02
350: Southwick-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
351: Southwick-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
353: Tensed-----	50	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.04
Pedee-----	35	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.04
354: Tensed-----	50	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Dusty	0.50 0.04
Pedee-----	35	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.04
355: Southwick-----	55	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
Driscoll-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
356: Southwick-----	55	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Dusty	0.50 0.19
Driscoll-----	30	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Dusty	0.50 0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
360: Larkin-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
361: Larkin-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
363: Larkin-----	55	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
Driscoll-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
364: Larkin-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
Southwick-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
367: Larkin-----	55	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.19
Driscoll-----	30	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Dusty	0.50 0.19
400: Driscoll-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
405: Thatuna-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Naff-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
406: Thatuna-----	50	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
406: Naff-----	40	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.22
410: Palouse-----	50	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.19
Naff-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
411: Palouse-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.19
414: Naff-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Thatuna-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
415: Naff-----	50	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Tilma-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
416: Naff-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Thatuna-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
417: Naff-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Palouse-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting	Value	Suitability for mechanical planting	Value	Suitability for use of harvesting equipment	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
420: Garfield-----	45	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Slope Stickiness; high plasticity index	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.22
Tilma-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
421: Naff-----	55	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.22
Garfield-----	30	Moderately suited Stickiness; high plasticity index	0.50	Poorly suited Slope Stickiness; high plasticity index	0.75 0.50	Moderately suited Low strength Dusty	0.50 0.22
500: Hobo-----	50	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Threebear-----	35	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02
501: Hobo, warm-----	45	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
Threebear, warm-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
510: Honeyjones-----	45	Well suited		Unsuited Slope	1.00	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
Ahrs-----	35	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Slope Dusty	0.50 0.01
600: Ardenvoir-----	50	Well suited		Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Slope Low strength Dusty	0.50 0.50 0.01
Huckle-----	35	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
601: Ardenvoir-----	55	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
McCrosket-----	25	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Slope Dusty	0.50 0.02
605: Benewah-----	45	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.03
Rasser-----	35	Moderately suited Rock fragments	0.50	Moderately suited Rock fragments Slope	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.03
606: Benewah-----	45	Well suited		Unsuited Slope	1.00	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03
Rasser-----	40	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03
610: Schumacher-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.14
611: Schumacher-----	45	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.15
Tekoa-----	40	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.75	Moderately suited Slope Dusty	0.50 0.15
612: Libertybutte-----	45	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.17
Tekoa-----	40	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.75	Moderately suited Slope Dusty	0.50 0.17
613: Ardenvoir, dry-----	50	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
613: Lotuspoint-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.50	Well suited Dusty	0.05
614: Ardenvoir, dry-----	50	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Lotuspoint-----	35	Moderately suited Rock fragments Slope	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.05
617: Tekoa-----	80	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.75	Moderately suited Slope Dusty	0.50 0.15
621: Huckle-----	80	Well suited		Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
625: Huckle-----	45	Well suited		Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
Ardenvoir-----	40	Well suited		Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Slope Low strength Dusty	0.50 0.50 0.01
650: Grangemont-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
651: Kingspeak-----	55	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Shayhill, stony surface-----	30	Moderately suited Rock fragments	0.50	Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02
652: Kingspeak-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
653: Kingspeak, cool-----	80	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Dusty	0.50 0.02
655: Tigley, moist-----	80	Well suited		Unsuited Slope Rock fragments	1.00 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
656: Kingspeak, dry-----	80	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Dusty	0.50 0.02
660: Threebear-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
662: Threebear, warm-----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
663: Threebear, warm-----	50	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.01
Porrett-----	35	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.01
665: Grangemont, warm----	80	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength Dusty	0.50 0.01
670: Honeyjones, warm----	80	Well suited		Unsuited Slope	1.00	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
671: Honeyjones-----	80	Well suited		Unsuited Slope	1.00	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
680: Ardenvoir-----	45	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.01
Huckle-----	40	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
681: Huckle-----	45	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength Dusty	0.50 0.01
Ahrs-----	35	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Well suited Dusty	0.01
700: Ardenvoir-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Huckle-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
701: Ardenvoir-----	55	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
McCrosket-----	25	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.01
703: Ardenvoir, dry-----	45	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Ardenvoir-----	40	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
704: Ardenvoir, dry-----	45	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Ardenvoir-----	40	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
705: Ardenvoir-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
705: Rasser-----	30	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
706: Ardenvoir-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
707: Huckle, dry-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Ardenvoir-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
710: McCrosket-----	50	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Slope Dusty	0.50 0.01
Ardenvoir-----	30	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Low strength Slope Dusty	0.50 0.50 0.01
711: McCrosket-----	50	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.01
Ardenvoir-----	30	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
712: McCrosket-----	50	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.05
Tekoa-----	30	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Dusty	1.00 0.12
716: Ahrs-----	80	Well suited		Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Slope Dusty	0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
720: Huckle-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
721: Huckle-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Ardenvoir-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
735: Lotuspoint, stony surface-----	80	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.04
736: Lotuspoint, stony surface-----	65	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.03
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
757: Hugus, warm-----	80	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
758: Tigley, moist-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Hugus-----	35	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
765: Saint Maries-----	45	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Dusty	1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting	Value	Suitability for mechanical planting	Value	Suitability for use of harvesting equipment	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
765: Huckle-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
770: Pinecreek-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.02
771: Honeyjones, warm----	80	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
772: Honeyjones, warm----	45	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Ahrs-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.01
773: Honeyjones, dry-----	80	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
774: Pinecreek, moist----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
775: Pinecreek, moist----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.02
776: Cassyhill-----	80	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Dusty	1.00 0.05
777: Boulder creek, warm--	80	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
778: Cassyhill-----	50	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited Dusty	0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
778: Lotuspoint-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.50	Well suited Dusty	0.05
779: Boulder creek-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
780: Ardenvoir-----	30	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Huckle-----	30	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Saint Maries, dry---	30	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.01
781: Ahms, moist-----	45	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.01
Honeyjones, warm---	35	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
782: Ardenvoir, dry-----	45	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Cassyhill-----	35	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Dusty	1.00 0.05
784: Pinecreek, moist----	45	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.02
Lotuspoint-----	35	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Dusty	1.00 0.04
791: Latour-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Well suited		Well suited		Moderately suited Low strength Dusty	0.50 0.02
Aquic Udifluvents---	40	Well suited		Moderately suited Rock fragments	0.50	Moderately suited Low strength Dusty	0.50 0.02
902: Ahrs-----	80	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.01
903: Ahrs-----	50	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.01
Pinecreek-----	30	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.01
907: Honeyjones-----	80	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
908: Honeyjones-----	45	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.01
Ahrs-----	35	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Dusty	1.00 0.01
913: Hobo-----	85	Well suited		Unsuited Slope	1.00	Moderately suited Slope Low strength Dusty	0.50 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 16.--Forestland Planting and Harvesting--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ac1: Arson-----	40	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.04
Carlinton-----	35	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.02
Ac2: Arson, dry-----	45	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.05
Carlinton, dry-----	30	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03
An4: Arson, dry-----	55	Moderately suited Slope	0.50	Unsuited Slope	1.00	Poorly suited Slope Low strength Dusty	1.00 0.50 0.03
Minaloosa, dry-----	20	Moderately suited Slope	0.50	Unsuited Slope Rock fragments	1.00 0.50	Poorly suited Slope Low strength Dusty	1.00 0.50 0.02
Rs2: Reggear, moist-----	40	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03
Stewah-----	25	Well suited		Poorly suited Slope	0.75	Moderately suited Low strength Slope Dusty	0.50 0.50 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Well suited		Poorly suited Rock fragments	0.50
Typic Fluvaquents, protected-----	40	Well suited		Unsuited Wetness Rock fragments	1.00 0.50
116: Thatuna-----	45	Well suited		Well suited	
Caldwell-----	35	Well suited		Well suited	
118: Thatuna-----	50	Well suited		Well suited	
Cald-----	30	Well suited		Well suited	
120: Latahco-----	80	Well suited		Well suited	
121: Latahco-----	60	Well suited		Well suited	
Lovell-----	30	Well suited		Well suited	
122: Tilma-----	45	Well suited		Well suited	
Latah-----	40	Well suited		Well suited	
124: Caldwell-----	60	Well suited		Well suited	
Cald-----	25	Well suited		Well suited	
125: Lovell-----	55	Well suited		Well suited	
Porrett-----	20	Well suited		Well suited	
Aquandic Endoaquepts	15	Well suited		Well suited	
130: Porrett-----	80	Well suited		Well suited	
136: Lovell-----	45	Well suited		Well suited	
Porrett-----	40	Well suited		Well suited	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
141: Miesen-----	80	Well suited		Well suited	
142: Miesen-----	45	Well suited		Well suited	
Ramsdell-----	40	Well suited		Unsuited Wetness	1.00
143: Miesen, protected, drained-----	80	Well suited		Well suited	
144: Miesen, protected, drained-----	50	Well suited		Well suited	
Ramsdell, protected, drained	35	Well suited		Unsuited Wetness	1.00
145: Bellslake, protected, drained	80	Well suited		Unsuited Wetness	1.00
150: Pywell, protected, drained-----	80	Well suited		Unsuited Wetness	1.00
155: Ramsdell-----	80	Well suited		Unsuited Wetness	1.00
156: Ramsdell, protected, drained	80	Well suited		Unsuited Wetness	1.00
157: Ramsdell, protected, drained	50	Well suited		Unsuited Wetness	1.00
DeVoignes, protected, drained	30	Well suited		Unsuited Wetness	1.00
158: DeVoignes-----	45	Well suited		Unsuited Wetness	1.00
Pywell-----	40	Poorly suited Wetness	0.50	Unsuited Wetness	1.00
200: Blinn, stony surface	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
201: Blinn, stony surface	80	Unsuited Slope	1.00	Unsuited Slope	1.00
202: Blinn, stony surface	55	Unsuited Slope	1.00	Unsuited Slope	1.00
Bobbitt, stony surface-----	30	Unsuited Slope	1.00	Unsuited Restrictive layer	1.00
		Rock fragments	0.50	Slope	1.00
210: Agatha, stony surface-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
				Rock fragments	0.50
212: Agatha, stony surface-----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
				Rock fragments	0.50
230: Lacy, stony surface	65	Poorly suited Rock fragments	0.50	Unsuited Restrictive layer	1.00
		Slope	0.50	Rock fragments	1.00
				Slope	0.50
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Unsuited Slope	1.00	Unsuited Restrictive layer	1.00
		Rock fragments	0.50	Slope	1.00
				Rock fragments	1.00
Rock outcrop-----	25	Not rated		Not rated	
232: Lacy, stony surface	55	Poorly suited Rock fragments	0.50	Unsuited Restrictive layer	1.00
		Slope	0.50	Rock fragments	1.00
				Slope	0.50
Bobbitt, stony surface-----	30	Poorly suited Rock fragments	0.50	Unsuited Restrictive layer	1.00
		Slope	0.50	Slope	0.50
233: Lacy, very stony surface-----	55	Unsuited Slope	1.00	Unsuited Restrictive layer	1.00
		Rock fragments	0.50	Slope	1.00
				Rock fragments	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
233: Bobbitt, very stony surface-----	30	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer	1.00 0.50
250: Dorb, warm, stony surface-----	80	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
255: Shayhill, stony surface-----	80	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
256: Shayhill, stony surface-----	80	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope	1.00
257: Shayhill, dry, stony surface-----	80	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
260: Seddow-----	80	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
261: Sly, dry-----	45	Unsuited Slope	1.00	Unsuited Slope	1.00
Shayhill, dry-----	40	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
262: Seddow-----	45	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Sly, dry-----	40	Unsuited Slope	1.00	Unsuited Slope	1.00
300: Taney-----	80	Well suited		Well suited	
301: Taney-----	80	Well suited		Well suited	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Well suited		Well suited	
Benewah-----	40	Well suited		Well suited	
304: Benewah-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Santa-----	35	Well suited		Well suited	
310: Santa-----	80	Well suited		Well suited	
311: Santa-----	80	Well suited		Well suited	
314: Sharptop-----	45	Well suited		Well suited	
Santa-----	40	Well suited		Well suited	
315: Setters-----	80	Well suited		Well suited	
316: Setters-----	50	Well suited		Well suited	
Taney-----	30	Well suited		Well suited	
320: Reggear-----	80	Well suited		Well suited	
321: Reggear, moist-----	80	Well suited		Well suited	
322: Reggear, moist-----	50	Well suited		Well suited	
Sly-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
323: Bechtel-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Reggear-----	35	Poorly suited Slope	0.50	Poorly suited Slope	0.50
325: Reggear-----	55	Well suited		Well suited	
Sharptop, basalt substratum-----	30	Well suited		Well suited	
326: Reggear-----	50	Well suited		Well suited	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
326: Seddow-----	35	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
330: Carlinton-----	50	Well suited		Well suited	
Carlinton, dry-----	30	Well suited		Well suited	
335: Carlinton, dry-----	80	Well suited		Well suited	
336: Carlinton, dry-----	55	Well suited		Well suited	
Taney-----	25	Well suited		Well suited	
340: Arson-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Lotuspoint-----	35	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Restrictive layer Rock fragments	0.50 0.50 0.50
341: Sinkler-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Arson-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
342: Sinkler, dry-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Arson, dry-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
350: Southwick-----	80	Well suited		Well suited	
351: Southwick-----	80	Well suited		Well suited	
353: Tensed-----	50	Well suited		Well suited	
Pedee-----	35	Well suited		Well suited	
354: Tensed-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Pedee-----	35	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
355: Southwick-----	55	Well suited		Well suited	
Driscoll-----	30	Well suited		Well suited	
356: Southwick-----	55	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Driscoll-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
360: Larkin-----	80	Well suited		Well suited	
361: Larkin-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
363: Larkin-----	55	Well suited		Well suited	
Driscoll-----	30	Well suited		Well suited	
364: Larkin-----	50	Well suited		Well suited	
Southwick-----	35	Well suited		Well suited	
367: Larkin-----	55	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Driscoll-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
400: Driscoll-----	80	Well suited		Well suited	
405: Thatuna-----	45	Well suited		Well suited	
Naff-----	40	Well suited		Well suited	
406: Thatuna-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Naff-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
410: Palouse-----	50	Well suited		Well suited	
Naff-----	35	Well suited		Well suited	
411: Palouse-----	80	Well suited		Well suited	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
414: Naff-----	45	Well suited		Well suited	
Thatuna-----	40	Well suited		Well suited	
415: Naff-----	50	Well suited		Well suited	
Tilma-----	35	Well suited		Well suited	
416: Naff-----	45	Well suited		Well suited	
Thatuna-----	40	Well suited		Well suited	
417: Naff-----	45	Well suited		Well suited	
Palouse-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
420: Garfield-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Tilma-----	35	Well suited		Well suited	
421: Naff-----	55	Well suited		Well suited	
Garfield-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
500: Hobo-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Threebear-----	35	Well suited		Well suited	
501: Hobo, warm-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Threebear, warm----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
510: Honeyjones-----	45	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
Ahrs-----	35	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
600: Ardenvoir-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
600: Huckle-----	35	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
601: Ardenvoir-----	55	Poorly suited Slope	0.50	Poorly suited Slope	0.50
McCrosket-----	25	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
605: Benewah-----	45	Well suited		Well suited	
Rasser-----	35	Poorly suited Rock fragments	0.50	Well suited	
606: Benewah-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Rasser-----	40	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
610: Schumacher-----	80	Well suited		Well suited	
611: Schumacher-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Tekoa-----	40	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Restrictive layer Rock fragments	0.50 0.50 0.50
612: Libertybutte-----	45	Poorly suited Slope	0.50	Unsuited Restrictive layer Slope	1.00 0.50
Tekoa-----	40	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Restrictive layer Rock fragments	0.50 0.50 0.50
613: Ardenvoir, dry-----	50	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Lotuspoint-----	35	Poorly suited Rock fragments Slope	0.50 0.50	Poorly suited Restrictive layer Slope Rock fragments	0.50 0.50 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
614: Ardenvoir, dry-----	50	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Lotuspoint-----	35	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer Rock fragments	1.00 0.50 0.50
617: Tekoa-----	80	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Restrictive layer Rock fragments	0.50 0.50 0.50
621: Huckle-----	80	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
625: Huckle-----	45	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
Ardenvoir-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
650: Grangemont-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
651: Kingspeak-----	55	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Shayhill, stony surface-----	30	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
652: Kingspeak-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
653: Kingspeak, cool-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
655: Tigley, moist-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
656: Kingspeak, dry-----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
660: Threebear-----	80	Well suited		Well suited	
662: Threebear, warm----	80	Well suited		Well suited	
663: Threebear, warm----	50	Well suited		Well suited	
Porrett-----	35	Well suited		Well suited	
665: Grangemont, warm----	80	Poorly suited Slope	0.50	Poorly suited Slope	0.50
670: Honeyjones, warm----	80	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
671: Honeyjones-----	80	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
680: Ardenvoir-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Huckle-----	40	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
681: Huckle-----	45	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
Ahrs-----	35	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
700: Ardenvoir-----	50	Unsuited Slope	1.00	Unsuited Slope	1.00
Huckle-----	35	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
701: Ardenvoir-----	55	Unsuited Slope	1.00	Unsuited Slope	1.00
McCrosket-----	25	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
703: Ardenvoir, dry-----	45	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Ardenvoir-----	40	Unsuited Slope	1.00	Unsuited Slope	1.00
704: Ardenvoir, dry-----	45	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Ardenvoir-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
705: Ardenvoir-----	50	Unsuited Slope	1.00	Unsuited Slope	1.00
Rasser-----	30	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope	1.00
706: Ardenvoir-----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
707: Huckle, dry-----	50	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Ardenvoir-----	35	Unsuited Slope	1.00	Unsuited Slope	1.00
710: McCrosket-----	50	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Ardenvoir-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
711: McCrosket-----	50	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Ardenvoir-----	30	Unsuited Slope	1.00	Unsuited Slope	1.00
712: McCrosket-----	50	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
712: Tekoa-----	30	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer Rock fragments	1.00 0.50 0.50
716: Ahrs-----	80	Poorly suited Slope	0.50	Poorly suited Slope Rock fragments	0.50 0.50
720: Huckle-----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
721: Huckle-----	50	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Ardenvoir-----	35	Unsuited Slope	1.00	Unsuited Slope	1.00
735: Lotuspoint, stony surface-----	80	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer Rock fragments	1.00 0.50 0.50
736: Lotuspoint, stony surface-----	65	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer Rock fragments	1.00 0.50 0.50
Rock outcrop-----	15	Not rated		Not rated	
756: Tigley-----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
757: Hugus, warm-----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
758: Tigley, moist-----	50	Unsuited Slope	1.00	Unsuited Slope	1.00
Hugus-----	35	Unsuited Slope	1.00	Unsuited Slope	1.00
765: Saint Maries-----	45	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
765: Huckle-----	35	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
770: Pinecreek-----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
771: Honeyjones, warm----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
772: Honeyjones, warm----	45	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Ahrs-----	35	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
773: Honeyjones, dry----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
774: Pinecreek, moist----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
775: Pinecreek, moist----	80	Unsuited Slope	1.00	Unsuited Slope	1.00
776: Cassyhill-----	80	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Restrictive layer Slope	1.00 1.00
777: Boulder creek, warm--	80	Unsuited Slope	1.00	Unsuited Slope	1.00
778: Cassyhill-----	50	Poorly suited Rock fragments Slope	0.50 0.50	Unsuited Restrictive layer Slope	1.00 0.50
Lotuspoint-----	35	Poorly suited Rock fragments Slope	0.50 0.50	Poorly suited Restrictive layer Slope Rock fragments	0.50 0.50 0.50
779: Boulder creek-----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
780: Ardenvoir-----	30	Unsuited Slope	1.00	Unsuited Slope	1.00
Huckle-----	30	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Saint Maries, dry---	30	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
781: Ahrs, moist-----	45	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope	1.00
Honeyjones, warm----	35	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
782: Ardenvoir, dry-----	45	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Cassyhill-----	35	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Restrictive layer Slope	1.00 1.00
784: Pinecreek, moist----	45	Unsuited Slope	1.00	Unsuited Slope	1.00
Lotuspoint-----	35	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Restrictive layer Rock fragments	1.00 0.50 0.50
791: Latour-----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
901: Aquandic Endoaquepts	40	Well suited		Well suited	
Aquic Udifluvents---	40	Well suited		Poorly suited Rock fragments	0.50
902: Ahrs-----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
903: Ahrs-----	50	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Pinecreek-----	30	Unsuited Slope	1.00	Unsuited Slope	1.00
907: Honeyjones-----	80	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
908: Honeyjones-----	45	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
Ahrs-----	35	Unsuited Slope	1.00	Unsuited Slope Rock fragments	1.00 0.50
913: Hobo-----	85	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Ac1: Arson-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Carlinton-----	35	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Ac2: Arson, dry-----	45	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Carlinton, dry-----	30	Poorly suited Slope	0.50	Poorly suited Slope	0.50
An4: Arson, dry-----	55	Unsuited Slope	1.00	Unsuited Slope	1.00
Minaloosa, dry-----	20	Unsuited Slope	1.00	Unsuited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 17.--Forestland Site Preparation--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Rs2: Reggear, moist-----	40	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Stewah-----	25	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Low		Low	
Typic Fluvaquents, protected-----	40	Low		Moderate Wetness	0.50
116: Thatuna-----	45	Low		Low	
Caldwell-----	35	Low		Moderate Wetness	0.50
118: Thatuna-----	50	Low		Low	
Cald-----	30	Low		Moderate Wetness	0.50
120: Latahco-----	80	Low		Moderate Wetness	0.50
121: Latahco-----	60	Low		Moderate Wetness	0.50
Lovell-----	30	Low		Moderate Wetness	0.50
122: Tilma-----	45	Low		Low	
Latah-----	40	Low		Low	
124: Caldwell-----	60	Low		Moderate Wetness	0.50
Cald-----	25	Low		Moderate Wetness	0.50
125: Lovell-----	55	Low		Moderate Wetness	0.50
Porrett-----	20	Low		High Wetness	1.00
Aquandic Endoaquepts	15	Low		Moderate Wetness	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
130: Porrett-----	80	Low		High Wetness	1.00
136: Lovell-----	45	Low		Moderate Wetness	0.50
Porrett-----	40	Low		High Wetness	1.00
141: Miesen-----	80	Low		Low	
142: Miesen-----	45	Low		Low	
Ramsdell-----	40	Low		High Wetness	1.00
143: Miesen, protected, drained-----	80	Low		Low	
144: Miesen, protected, drained-----	50	Low		Low	
Ramsdell, protected, drained	35	Low		Moderate Wetness	0.50
145: Bellslake, protected, drained	80	Low		High Wetness	1.00
150: Pywell, protected, drained-----	80	Low		High Wetness	1.00
155: Ramsdell-----	80	Low		High Wetness	1.00
156: Ramsdell, protected, drained	80	Low		Moderate Wetness	0.50
157: Ramsdell, protected, drained	50	Low		Moderate Wetness	0.50
DeVoignes, protected, drained	30	Low		High Wetness	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
158: DeVoignes-----	45	Low		High Wetness	1.00
Pywell-----	40	Low		High Wetness	1.00
200: Blinn, stony surface	80	Low		Low	
201: Blinn, stony surface	80	Low		Low	
202: Blinn, stony surface	55	Low		Low	
Bobbitt, stony surface-----	30	Low		Low	
210: Agatha, stony surface-----	80	Low		Moderate Available water	0.50
212: Agatha, stony surface-----	80	Low		Moderate Available water	0.50
230: Lacy, stony surface	65	Low		High Available water	1.00
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Low		High Available water	1.00
Rock outcrop-----	25	Not rated		Not rated	
232: Lacy, stony surface	55	Low		High Available water	1.00
Bobbitt, stony surface-----	30	Low		High Available water	1.00
233: Lacy, very stony surface-----	55	Low		High Available water	1.00
Bobbitt, very stony surface-----	30	Low		High Available water	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250: Dorb, warm, stony surface-----	80	Low		Low	
255: Shayhill, stony surface-----	80	Low		Low	
256: Shayhill, stony surface-----	80	Low		Low	
257: Shayhill, dry, stony surface-----	80	Low		Low	
260: Seddow-----	80	Low		Moderate Available water	0.50
261: Sly, dry-----	45	Low		Low	
Shayhill, dry-----	40	Low		Low	
262: Seddow-----	45	Low		Moderate Available water	0.50
Sly, dry-----	40	Low		Moderate Available water	0.50
300: Taney-----	80	Low		Moderate Wetness	0.50
301: Taney-----	80	Low		Moderate Wetness	0.50
303: Carlinton-----	45	Low		Moderate Wetness	0.50
Benewah-----	40	Low		Moderate Wetness	0.50
304: Benewah-----	45	Low		Moderate Wetness	0.50
Santa-----	35	Low		High Wetness	1.00
310: Santa-----	80	Low		High Wetness	1.00
311: Santa-----	80	Low		High Wetness	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
314: Sharptop-----	45	Low		Low	
Santa-----	40	Low		High Wetness	1.00
315: Setters-----	80	Low		Moderate Wetness	0.50
316: Setters-----	50	Low		Moderate Wetness	0.50
Taney-----	30	Low		Moderate Wetness	0.50
320: Reggear-----	80	Low		Low	
321: Reggear, moist-----	80	Low		Low	
322: Reggear, moist-----	50	Low		Low	
Sly-----	30	Low		Low	
323: Bechtel-----	50	Low		Moderate Available water	0.50
Reggear-----	35	Low		Low	
325: Reggear-----	55	Low		Low	
Sharptop, basalt substratum-----	30	Low		Low	
326: Reggear-----	50	Low		Low	
Seddow-----	35	Low		Low	
330: Carlinton-----	50	Low		Moderate Wetness	0.50
Carlinton, dry-----	30	Low		Moderate Wetness	0.50
335: Carlinton, dry-----	80	Low		Moderate Wetness	0.50
336: Carlinton, dry-----	55	Low		Moderate Wetness	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
336: Taney-----	25	Low		Moderate Wetness	0.50
340: Arson-----	45	Low		Moderate Available water	0.50
Lotuspoint-----	35	Low		High Available water	1.00
341: Sinkler-----	45	Low		Moderate Available water	0.50
Arson-----	40	Low		Moderate Available water	0.50
342: Sinkler, dry-----	45	Low		Moderate Available water	0.50
Arson, dry-----	40	Low		Moderate Available water	0.50
350: Southwick-----	80	Low		Low	
351: Southwick-----	80	Low		Low	
353: Tensed-----	50	Low		Low	
Pedee-----	35	Low		Moderate Available water	0.50
354: Tensed-----	50	Low		Moderate Available water	0.50
Pedee-----	35	Low		High Available water	1.00
355: Southwick-----	55	Low		Low	
Driscoll-----	30	Low		Low	
356: Southwick-----	55	Low		Low	
Driscoll-----	30	Low		Moderate Available water	0.50
360: Larkin-----	80	Low		Low	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
361: Larkin-----	80	Low		Low	
363: Larkin-----	55	Low		Low	
Driscoll-----	30	Low		Low	
364: Larkin-----	50	Low		Low	
Southwick-----	35	Low		Low	
367: Larkin-----	55	Low		Moderate Available water	0.50
Driscoll-----	30	Low		Moderate Available water	0.50
400: Driscoll-----	80	Low		Low	
405: Thatuna-----	45	Low		Low	
Naff-----	40	Low		Low	
406: Thatuna-----	50	Low		Low	
Naff-----	40	Low		Moderate Available water	0.50
410: Palouse-----	50	Low		Low	
Naff-----	35	Low		Low	
411: Palouse-----	80	Low		Low	
414: Naff-----	45	Low		Low	
Thatuna-----	40	Low		Low	
415: Naff-----	50	Low		Low	
Tilma-----	35	Low		Low	
416: Naff-----	45	Low		Low	
Thatuna-----	40	Low		Low	
417: Naff-----	45	Low		Low	
Palouse-----	40	Low		Low	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
420: Garfield-----	45	Low		Low	
Tilma-----	35	Low		Low	
421: Naff-----	55	Low		Low	
Garfield-----	30	Low		Moderate Available water	0.50
500: Hobo-----	50	Low		High Wetness	1.00
Threebear-----	35	Low		High Wetness	1.00
501: Hobo, warm-----	45	Low		High Wetness	1.00
Threebear, warm----	40	Low		High Wetness	1.00
510: Honeyjones-----	45	Low		Low	
Ahrs-----	35	Low		Low	
600: Ardenvoir-----	50	Low		Moderate Available water	0.50
Huckle-----	35	Low		Low	
601: Ardenvoir-----	55	Low		Moderate Available water	0.50
McCrosket-----	25	Low		Moderate Available water	0.50
605: Benewah-----	45	Low		Moderate Wetness	0.50
Rasser-----	35	Low		Moderate Available water	0.50
606: Benewah-----	45	Low		Moderate Wetness Available water	0.50 0.50
Rasser-----	40	Low		High Available water	1.00
610: Schumacher-----	80	Low		Low	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
611: Schumacher-----	45	Low		Low	
Tekoa-----	40	Low		High Available water	1.00
612: Libertybutte-----	45	Low		High Available water	1.00
Tekoa-----	40	Low		High Available water	1.00
613: Ardenvoir, dry-----	50	Low		High Available water	1.00
Lotuspoint-----	35	Low		Moderate Available water	0.50
614: Ardenvoir, dry-----	50	Low		High Available water	1.00
Lotuspoint-----	35	Low		High Available water	1.00
617: Tekoa-----	80	Low		High Available water	1.00
621: Huckle-----	80	Low		Low	
625: Huckle-----	45	Low		Low	
Ardenvoir-----	40	Low		Moderate Available water	0.50
650: Grangemont-----	80	Low		Low	
651: Kingspeak-----	55	Low		Low	
Shayhill, stony surface-----	30	Low		Low	
652: Kingspeak-----	80	Low		Low	
653: Kingspeak, cool-----	80	Low		Low	
655: Tigley, moist-----	80	Low		Low	
656: Kingspeak, dry-----	80	Low		Low	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
660: Threebear-----	80	Low		High Wetness	1.00
662: Threebear, warm----	80	Low		High Wetness	1.00
663: Threebear, warm----	50	Low		High Wetness	1.00
Porrett-----	35	Low		High Wetness	1.00
665: Grangemont, warm----	80	Low		Low	
670: Honeyjones, warm----	80	Low		Low	
671: Honeyjones-----	80	Low		Low	
680: Ardenvoir-----	45	Low		Low	
Huckle-----	40	Low		Low	
681: Huckle-----	45	Low		Low	
Ahrs-----	35	Low		Low	
700: Ardenvoir-----	50	Low		Moderate Available water	0.50
Huckle-----	35	Low		Low	
701: Ardenvoir-----	55	Low		Moderate Available water	0.50
McCrosket-----	25	Low		Moderate Available water	0.50
703: Ardenvoir, dry-----	45	Low		High Available water	1.00
Ardenvoir-----	40	Low		Moderate Available water	0.50
704: Ardenvoir, dry-----	45	Low		High Available water	1.00
Ardenvoir-----	40	Low		Moderate Available water	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
705: Ardenvoir-----	50	Low		Moderate Available water	0.50
Rasser-----	30	Low		High Available water	1.00
706: Ardenvoir-----	80	Low		Moderate Available water	0.50
707: Huckle, dry-----	50	Low		Low	
Ardenvoir-----	35	Low		Moderate Available water	0.50
710: McCrosket-----	50	Low		Moderate Available water	0.50
Ardenvoir-----	30	Low		Moderate Available water	0.50
711: McCrosket-----	50	Low		Moderate Available water	0.50
Ardenvoir-----	30	Low		Moderate Available water	0.50
712: McCrosket-----	50	Low		Low	
Tekoa-----	30	Low		High Available water	1.00
716: Ahhs-----	80	Low		Moderate Available water	0.50
720: Huckle-----	80	Low		Low	
721: Huckle-----	50	Low		Low	
Ardenvoir-----	35	Low		Moderate Available water	0.50
735: Lotuspoint, stony surface-----	80	Low		High Available water	1.00
736: Lotuspoint, stony surface-----	65	Low		High Available water	1.00
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
756: Tigley-----	80	Low		Low	
757: Hugus, warm-----	80	Low		Low	
758: Tigley, moist-----	50	Low		Low	
Hugus-----	35	Low		Low	
765: Saint Maries-----	45	Low		Low	
Huckle-----	35	Low		Low	
770: Pinecreek-----	80	Low		Moderate Available water	0.50
771: Honeyjones, warm----	80	Low		Low	
772: Honeyjones, warm----	45	Low		Low	
Ahrs-----	35	Low		Moderate Available water	0.50
773: Honeyjones, dry-----	80	Low		Low	
774: Pinecreek, moist----	80	Low		Low	
775: Pinecreek, moist----	80	Low		Moderate Available water	0.50
776: Cassyhill-----	80	Low		High Available water	1.00
777: Bouldercreek, warm--	80	Low		Low	
778: Cassyhill-----	50	Low		High Available water	1.00
Lotuspoint-----	35	Low		Moderate Available water	0.50
779: Bouldercreek-----	80	Low		Low	
780: Ardenvoir-----	30	Low		Moderate Available water	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
780: Huckle-----	30	Low		Low	
Saint Maries, dry---	30	Low		Low	
781: Ahhs, moist-----	45	Low		Low	
Honeyjones, warm----	35	Low		Low	
782: Ardenvoir, dry-----	45	Low		High Available water	1.00
Cassyhill-----	35	Low		High Available water	1.00
784: Pinecreek, moist----	45	Low		Moderate Available water	0.50
Lotuspoint-----	35	Low		High Available water	1.00
791: Latour-----	80	Low		Low	
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Low		Low	
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Low		Moderate Wetness	0.50
Aquic Udifluvents---	40	Low		Low	
902: Ahhs-----	80	Low		Low	
903: Ahhs-----	50	Low		Low	
Pinecreek-----	30	Low		Moderate Available water	0.50
907: Honeyjones-----	80	Low		Low	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 18.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
908: Honeyjones-----	45	Low		Low	
Ahrs-----	35	Low		Low	
913: Hobo-----	85	Low		High Wetness	1.00
Ac1: Arson-----	40	Low		Moderate Available water	0.50
Carlinton-----	35	Low		Moderate Wetness Available water	0.50 0.50
Ac2: Arson, dry-----	45	Low		Moderate Available water	0.50
Carlinton, dry-----	30	Low		Moderate Wetness Available water	0.50 0.50
An4: Arson, dry-----	55	Low		Moderate Available water	0.50
Minaloosa, dry-----	20	Low		High Available water	1.00
Rs2: Reggear, moist-----	40	Low		Moderate Available water	0.50
Stewah-----	25	Low		Moderate Available water	0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.---Camp Areas, Picnic Areas, and Playgrounds

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Flooding Dusty	1.00 0.03	Somewhat limited Dusty	0.03	Somewhat limited Flooding Dusty	0.60 0.03
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.03
116: Thatuna-----	45	Somewhat limited Dusty Depth to saturated zone	0.25 0.03	Somewhat limited Dusty Depth to saturated zone	0.25 0.02	Somewhat limited Dusty Slope Depth to saturated zone	0.25 0.13 0.03
Caldwell-----	35	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.25	Somewhat limited Depth to saturated zone Dusty	0.88 0.25	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.25
118: Thatuna-----	50	Somewhat limited Dusty Depth to saturated zone	0.22 0.03	Somewhat limited Dusty Depth to saturated zone	0.22 0.02	Somewhat limited Slope Dusty Depth to saturated zone	0.88 0.22 0.03
Cald-----	30	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.22	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.22	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.22
120: Latahco-----	80	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.07	Somewhat limited Depth to saturated zone Dusty	0.88 0.07	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.07
121: Latahco-----	60	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.07	Somewhat limited Depth to saturated zone Dusty	0.88 0.07	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121: Lovell-----	30	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.07	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.98 0.26 0.07	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.60 0.26 0.07
122: Tilma-----	45	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.88 0.41 0.22	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.56 0.41 0.22	Somewhat limited Depth to saturated zone Slow water movement Dusty Slope	0.88 0.41 0.22 0.13
Latah-----	40	Very limited Flooding Depth to saturated zone Dusty	1.00 0.98 0.22	Somewhat limited Depth to saturated zone Dusty	0.75 0.22	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.22
124: Caldwell-----	60	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.25	Somewhat limited Depth to saturated zone Dusty	0.88 0.25	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.25
Cald-----	25	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.25	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.25	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.25
125: Lovell-----	55	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.98 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.60 0.26 0.02
Porrett-----	20	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02
Aquandic Endoaquepts	15	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
130: Porrett-----	80	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.01	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.01	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.01
136: Lovell-----	45	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.98 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.60 0.26 0.02
Porrett-----	40	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.02	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.02
141: Miesen-----	80	Very limited Flooding Dusty	1.00 0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Dusty	0.60 0.04
142: Miesen-----	45	Very limited Flooding Dusty	1.00 0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Dusty	0.60 0.04
Ramsdell-----	40	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04
143: Miesen, protected, drained-----	80	Very limited Flooding Dusty	1.00 0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Dusty	0.60 0.04
144: Miesen, protected, drained-----	50	Very limited Flooding Dusty	1.00 0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Dusty	0.60 0.04
Ramsdell, protected, drained	35	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.03
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Flooding Organic matter content Dusty	1.00 1.00 1.00 0.03	Very limited Depth to saturated zone Organic matter content Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Organic matter content Flooding Dusty	1.00 1.00 0.60 0.03
155: Ramsdell-----	80	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.04
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.04
DeVoignes, protected, drained	30	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.60 0.04
158: DeVoignes-----	45	Very limited Depth to saturated zone Flooding Ponding Dusty	1.00 1.00 1.00 0.04	Very limited Ponding Depth to saturated zone Flooding Dusty	1.00 1.00 0.40 0.04	Very limited Depth to saturated zone Flooding Ponding Dusty	1.00 1.00 1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158: Pywell-----	40	Very limited Depth to saturated zone Flooding Ponding Organic matter content Dusty	1.00 1.00 1.00 1.00 0.04	Very limited Ponding Depth to saturated zone Organic matter content Flooding Dusty	1.00 1.00 1.00 0.40 0.04	Very limited Depth to saturated zone Organic matter content Flooding Ponding Dusty	1.00 1.00 1.00 1.00 1.00 0.04
200: Blinn, stony surface	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty Depth to bedrock	1.00 0.13 0.02 0.01
201: Blinn, stony surface	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty Depth to bedrock	1.00 0.13 0.02 0.01
202: Blinn, stony surface	55	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty Depth to bedrock	1.00 0.13 0.02 0.01
Bobbitt, stony surface-----	30	Very limited Slope Dusty	1.00 0.08	Very limited Slope Dusty	1.00 0.08	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 0.98 0.95 0.08
210: Agatha, stony surface-----	80	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03
212: Agatha, stony surface-----	80	Very limited Slope Gravel content Dusty	1.00 0.32 0.03	Very limited Slope Gravel content Dusty	1.00 0.32 0.03	Very limited Gravel content Slope Dusty	1.00 1.00 0.03
230: Lacy, stony surface	65	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.10	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.10	Very limited Depth to bedrock Slope Gravel content Dusty	1.00 1.00 0.41 0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231: Lacy, very stony surface-----	60	Very limited Slope Depth to bedrock Large stones content Dusty	1.00 1.00 0.19 0.07	Very limited Slope Depth to bedrock Large stones content Dusty	1.00 1.00 0.19 0.07	Very limited Slope Depth to bedrock Gravel content Large stones content Dusty	1.00 1.00 0.98 0.19 0.07
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.10	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.10	Very limited Depth to bedrock Slope Gravel content Dusty	1.00 1.00 0.41 0.10
Bobbitt, stony surface-----	30	Very limited Slope Dusty	1.00 0.10	Very limited Slope Dusty	1.00 0.10	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 0.98 0.95 0.10
233: Lacy, very stony surface-----	55	Very limited Slope Depth to bedrock Large stones content Dusty	1.00 1.00 0.19 0.07	Very limited Slope Depth to bedrock Large stones content Dusty	1.00 1.00 0.19 0.07	Very limited Slope Depth to bedrock Gravel content Large stones content Dusty	1.00 1.00 0.98 0.19 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Gravel content Depth to bedrock Large stones content Dusty	1.00 0.24 0.21 0.19 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.97 0.01
255: Shayhill, stony surface-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
256: Shayhill, stony surface-----	80	Very limited Slope Gravel content Dusty	1.00 0.57 0.01	Very limited Slope Gravel content Dusty	1.00 0.57 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Gravel content Dusty	1.00 0.57 0.03	Very limited Slope Gravel content Dusty	1.00 0.57 0.03	Very limited Gravel content Slope Dusty	1.00 1.00 0.03
260: Seddow-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
261: Sly, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Shayhill, dry-----	40	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
262: Seddow-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Sly, dry-----	40	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
300: Taney-----	80	Very limited Depth to saturated zone Dusty	1.00 0.04	Somewhat limited Depth to saturated zone Dusty	0.88 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.88 0.04
301: Taney-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
303: Carlinton-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.16 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
303: Benewah-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.94 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
304: Benewah-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.94 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Santa-----	35	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
310: Santa-----	80	Very limited Depth to saturated zone Dusty	1.00 0.04	Somewhat limited Depth to saturated zone Dusty	0.96 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.88 0.04
311: Santa-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
314: Sharptop-----	45	Somewhat limited Slope Dusty	0.63 0.02	Somewhat limited Slope Dusty	0.63 0.02	Very limited Slope Dusty	1.00 0.02
Santa-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02
315: Setters-----	80	Very limited Depth to saturated zone Slow water movement Dusty	1.00 0.41 0.04	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.94 0.41 0.04	Very limited Depth to saturated zone Slope Slow water movement Dusty	1.00 1.00 0.41 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
316: Setters-----	50	Very limited Depth to saturated zone Slow water movement Dusty	1.00 0.41 0.04	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.94 0.41 0.04	Very limited Depth to saturated zone Slope Slow water movement Dusty	1.00 1.00 0.41 0.04
Taney-----	30	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
320: Reggear-----	80	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.02
321: Reggear, moist-----	80	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.01	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.01
322: Reggear, moist-----	50	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.02
Sly-----	30	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
323: Bechtel-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.22 0.02
Reggear-----	35	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.56 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.02
325: Reggear-----	55	Somewhat limited Depth to saturated zone Dusty	0.88 0.02	Somewhat limited Depth to saturated zone Dusty	0.56 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.88 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325: Sharptop, basalt substratum-----	30	Somewhat limited Dusty	0.02	Somewhat limited Dusty	0.02	Very limited Slope Dusty	1.00 0.02
326: Reggear-----	50	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.88 0.02
Seddow-----	35	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
330: Carlinton-----	50	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.16 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
335: Carlinton, dry-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.84 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.84 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.04
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Dusty	1.00 0.04	Somewhat limited Depth to saturated zone Dusty	0.96 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.88 0.04
Taney-----	25	Very limited Depth to saturated zone Dusty	1.00 0.04	Somewhat limited Depth to saturated zone Dusty	0.88 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.88 0.04
340: Arson-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Lotuspoint-----	35	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.80 0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
341: Sinkler-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Arson-----	40	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
342: Sinkler, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Arson, dry-----	40	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
350: Southwick-----	80	Somewhat limited Dusty Depth to saturated zone	0.19 0.13	Somewhat limited Dusty Depth to saturated zone	0.19 0.06	Somewhat limited Slope Dusty Depth to saturated zone	0.88 0.19 0.13
351: Southwick-----	80	Somewhat limited Slope Dusty Depth to saturated zone	0.63 0.19 0.13	Somewhat limited Slope Dusty Depth to saturated zone	0.63 0.19 0.06	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.13
353: Tensed-----	50	Somewhat limited Depth to saturated zone Dusty	0.67 0.04	Somewhat limited Depth to saturated zone Dusty	0.35 0.04	Somewhat limited Slope Depth to saturated zone Dusty	0.88 0.67 0.04
Pedee-----	35	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.81 0.41 0.04	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.48 0.41 0.04	Very limited Slope Depth to saturated zone Gravel content Soil water movement Dusty	1.00 0.81 0.78 0.41 0.04
354: Tensed-----	50	Very limited Slope Depth to saturated zone Dusty	1.00 0.67 0.04	Very limited Slope Depth to saturated zone Dusty	1.00 0.35 0.04	Very limited Slope Depth to saturated zone Dusty	1.00 0.67 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
354: Pedee-----	35	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.81 0.41 0.04	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.48 0.41 0.04	Very limited Slope Depth to saturated zone Gravel content Slow water movement Dusty	1.00 0.81 0.78 0.41 0.04
355: Southwick-----	55	Somewhat limited Dusty Depth to saturated zone Slope	0.19 0.13 0.04	Somewhat limited Dusty Depth to saturated zone Slope	0.19 0.06 0.04	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.13
Driscoll-----	30	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.67 0.41 0.19	Somewhat limited Slow water movement Depth to saturated zone Dusty	0.41 0.35 0.19	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19
356: Southwick-----	55	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.13	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.06	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.13
Driscoll-----	30	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19	Very limited Slope Slow water movement Depth to saturated zone Dusty	1.00 0.41 0.35 0.19	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19
360: Larkin-----	80	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Very limited Slope Dusty	1.00 0.19
361: Larkin-----	80	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19
363: Larkin-----	55	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Very limited Slope Dusty	1.00 0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363: Driscoll-----	30	Somewhat limited Depth to saturated zone Slow water movement Dusty Slope	0.67 0.41 0.19 0.04	Somewhat limited Slow water movement Depth to saturated zone Dusty Slope	0.41 0.35 0.19 0.04	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19
364: Larkin-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Very limited Slope Dusty	1.00 0.19
Southwick-----	35	Somewhat limited Dusty Depth to saturated zone	0.19 0.13	Somewhat limited Dusty Depth to saturated zone	0.19 0.06	Very limited Slope Dusty Depth to saturated zone	1.00 0.19 0.13
367: Larkin-----	55	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19
Driscoll-----	30	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19	Very limited Slope Slow water movement Depth to saturated zone Dusty	1.00 0.41 0.35 0.19	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19
400: Driscoll-----	80	Somewhat limited Depth to saturated zone Slope Slow water movement Dusty	0.67 0.63 0.41 0.19	Somewhat limited Slope Slow water movement Depth to saturated zone Dusty	0.63 0.41 0.35 0.19	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.67 0.41 0.19
405: Thatuna-----	45	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.03	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.03
Naff-----	40	Somewhat limited Slope Dusty	0.63 0.22	Somewhat limited Slope Dusty	0.63 0.22	Very limited Slope Dusty	1.00 0.22
406: Thatuna-----	50	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.03	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.02	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
406: Naff-----	40	Very limited Slope Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22
410: Palouse-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Slope Dusty	0.50 0.19
Naff-----	35	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Slope Dusty	0.88 0.19
411: Palouse-----	80	Somewhat limited Slope Dusty	0.63 0.19	Somewhat limited Slope Dusty	0.63 0.19	Very limited Slope Dusty	1.00 0.19
414: Naff-----	45	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Slope Dusty	0.88 0.22
Thatuna-----	40	Somewhat limited Dusty Depth to saturated zone	0.22 0.03	Somewhat limited Dusty Depth to saturated zone	0.22 0.02	Somewhat limited Slope Dusty Depth to saturated zone	0.88 0.22 0.03
415: Naff-----	50	Somewhat limited Dusty Slope	0.22 0.16	Somewhat limited Dusty Slope	0.22 0.16	Very limited Slope Dusty	1.00 0.22
Tilma-----	35	Somewhat limited Depth to saturated zone Slow water movement Dusty Slope	0.88 0.41 0.22 0.16	Somewhat limited Depth to saturated zone Slow water movement Dusty Slope	0.56 0.41 0.22 0.16	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.88 0.41 0.22
416: Naff-----	45	Somewhat limited Slope Dusty	0.63 0.22	Somewhat limited Slope Dusty	0.63 0.22	Very limited Slope Dusty	1.00 0.22
Thatuna-----	40	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.03	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.03
417: Naff-----	45	Somewhat limited Slope Dusty	0.63 0.22	Somewhat limited Slope Dusty	0.63 0.22	Very limited Slope Dusty	1.00 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
417: Palouse-----	40	Very limited Slope Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22
420: Garfield-----	45	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22
Tilma-----	35	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.88 0.41 0.22	Somewhat limited Depth to saturated zone Slow water movement Dusty	0.56 0.41 0.22	Very limited Slope Depth to saturated zone Slow water movement Dusty	1.00 0.88 0.41 0.22
421: Naff-----	55	Somewhat limited Dusty Slope	0.22 0.16	Somewhat limited Dusty Slope	0.22 0.16	Very limited Slope Dusty	1.00 0.22
Garfield-----	30	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22	Very limited Slope Slow water movement Dusty	1.00 0.41 0.22
500: Hobo-----	50	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.02
Threebear-----	35	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.90 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02
501: Hobo, warm-----	45	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.01
Threebear, warm-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
510: Honeyjones-----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Ahrs-----	35	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
600: Ardenvoir-----	50	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
Huckle-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
601: Ardenvoir-----	55	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
McCrosket-----	25	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Slope Gravel content Dusty	1.00 1.00 0.02
605: Benewah-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03	Somewhat limited Depth to saturated zone Slope Dusty	0.94 0.63 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Rasser-----	35	Somewhat limited Slope Dusty	0.63 0.03	Somewhat limited Slope Dusty	0.63 0.03	Very limited Slope Dusty	1.00 0.03
606: Benewah-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.94 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Rasser-----	40	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03
610: Schumacher-----	80	Somewhat limited Slope Dusty	0.63 0.14	Somewhat limited Slope Dusty	0.63 0.14	Very limited Slope Gravel content Dusty	1.00 0.22 0.14

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
611: Schumacher-----	45	Very limited Slope Dusty	1.00 0.15	Very limited Slope Dusty	1.00 0.15	Very limited Slope Gravel content Dusty	1.00 0.22 0.15
Tekoa-----	40	Very limited Slope Gravel content Dusty	1.00 1.00 0.15	Very limited Slope Gravel content Dusty	1.00 1.00 0.15	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.21 0.15
612: Libertybutte-----	45	Very limited Depth to bedrock Slope Gravel content Dusty	1.00 1.00 0.68 0.17	Very limited Depth to bedrock Slope Gravel content Dusty	1.00 1.00 0.68 0.17	Very limited Gravel content Depth to bedrock Slope Dusty	1.00 1.00 1.00 0.17
Tekoa-----	40	Very limited Slope Gravel content Dusty	1.00 1.00 0.17	Very limited Slope Gravel content Dusty	1.00 1.00 0.17	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.21 0.17
613: Ardenvoir, dry-----	50	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Lotuspoint-----	35	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.80 0.05
614: Ardenvoir, dry-----	50	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Lotuspoint-----	35	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.80 0.05
617: Tekoa-----	80	Very limited Slope Gravel content Dusty	1.00 1.00 0.15	Very limited Slope Gravel content Dusty	1.00 1.00 0.15	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.21 0.15
621: Huckle-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
625: Huckle-----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Ardenvoir-----	40	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
650: Grangemont-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
651: Kingspeak-----	55	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Shayhill, stony surface-----	30	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
652: Kingspeak-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
653: Kingspeak, cool-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
655: Tigley, moist-----	80	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
656: Kingspeak, dry-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
660: Threebear-----	80	Very limited Depth to saturated zone Dusty	1.00 0.01	Somewhat limited Depth to saturated zone Dusty	0.90 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
662: Threebear, warm-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
663: Threebear, warm-----	50	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.50 0.01
Porrett-----	35	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.01	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 0.40 0.26 0.01	Very limited Depth to saturated zone Flooding Slow water movement Dusty	1.00 1.00 0.26 0.01
665: Grangemont, warm----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
670: Honeyjones, warm----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
671: Honeyjones-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
680: Ardenvoir-----	45	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
Huckle-----	40	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
681: Huckle-----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Ahrs-----	35	Very limited Gravel content Slope Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
700: Ardenvoir-----	50	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
700: Huckle-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
701: Ardenvoir-----	55	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
McCrosket-----	25	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
703: Ardenvoir, dry-----	45	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Ardenvoir-----	40	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Ardenvoir-----	40	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
705: Ardenvoir-----	50	Very limited Slope Gravel content Dusty	1.00 0.32 0.02	Very limited Slope Gravel content Dusty	1.00 0.32 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Rasser-----	30	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
706: Ardenvoir-----	80	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
707: Huckle, dry-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
707: Ardenvoir-----	35	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
710: McCrosket-----	50	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
Ardenvoir-----	30	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
711: McCrosket-----	50	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
Ardenvoir-----	30	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
712: McCrosket-----	50	Very limited Slope Gravel content Dusty	1.00 0.92 0.05	Very limited Slope Gravel content Dusty	1.00 0.92 0.05	Very limited Slope Gravel content Dusty	1.00 1.00 0.05
Tekoa-----	30	Very limited Slope Gravel content Dusty	1.00 1.00 0.12	Very limited Slope Gravel content Dusty	1.00 1.00 0.12	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.21 0.12
716: Ahhs-----	80	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
720: Huckle-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
721: Huckle-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
721: Ardenvoir-----	35	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
735: Lotuspoint, stony--- surface	80	Very limited Slope Gravel content Dusty	1.00 0.16 0.04	Very limited Slope Gravel content Dusty	1.00 0.16 0.04	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 0.80 0.04
736: Lotuspoint, stony surface-----	65	Very limited Slope Gravel content Dusty	1.00 0.16 0.03	Very limited Slope Gravel content Dusty	1.00 0.16 0.03	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 0.80 0.03
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
757: Hugus, warm-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Hugus-----	35	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
765: Saint Maries-----	45	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
Huckle-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
770: Pinecreek-----	80	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
771: Honeyjones, warm----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
772: Honeyjones, warm----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Ahrs-----	35	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
773: Honeyjones, dry-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
774: Pinecreek, moist----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.22 0.02
775: Pinecreek, moist----	80	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
776: Cassyhill-----	80	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 1.00 0.05
777: Bouldercreek, warm--	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
778: Cassyhill-----	50	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Gravel content Depth to bedrock Slope Dusty	1.00 1.00 1.00 0.05
Lotuspoint-----	35	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Slope Gravel content Dusty	1.00 0.99 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.80 0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
779: Bouldercreek-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
780: Ardenvoir-----	30	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
Huckle-----	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Saint Maries, dry---	30	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
781: Ahms, moist-----	45	Very limited Slope Gravel content Large stones content Dusty	1.00 0.03 0.02 0.01	Very limited Slope Gravel content Large stones content Dusty	1.00 0.03 0.02 0.01	Very limited Slope Gravel content Large stones content Dusty	1.00 1.00 0.02 0.01
Honeyjones, warm----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Cassyhill-----	35	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Dusty	1.00 1.00 1.00 0.05	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 1.00 0.05
784: Pinecreek, moist----	45	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02	Very limited Gravel content Slope Dusty	1.00 1.00 0.02
Lotuspoint-----	35	Very limited Slope Gravel content Dusty	1.00 0.99 0.04	Very limited Slope Gravel content Dusty	1.00 0.99 0.04	Very limited Gravel content Slope Depth to bedrock Dusty	1.00 1.00 0.80 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
791: Latour-----	80	Very limited Slope Gravel content	1.00 0.01	Very limited Slope Gravel content	1.00 0.01	Very limited Slope Gravel content	1.00 1.00
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 1.00 0.02
Aquic Udifluvents---	40	Very limited Flooding Depth to saturated zone Dusty	1.00 0.24 0.02	Somewhat limited Depth to saturated zone Dusty	0.12 0.02	Somewhat limited Flooding Depth to saturated zone Dusty	0.60 0.24 0.02
902: Ahrs-----	80	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
903: Ahrs-----	50	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
Pinecreek-----	30	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
907: Honeyjones-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 19.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
908: Honeyjones-----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.78 0.01
Ahrs-----	35	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
913: Hobo-----	85	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.02
Acl: Arson-----	40	Very limited Slope Dusty	1.00 0.04	Very limited Slope Dusty	1.00 0.04	Very limited Slope Dusty	1.00 0.04
Carlinton-----	35	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.02
Ac2: Arson, dry-----	45	Very limited Slope Dusty	1.00 0.05	Very limited Slope Dusty	1.00 0.05	Very limited Slope Dusty	1.00 0.05
Carlinton, dry-----	30	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.03
An4: Arson, dry-----	55	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03
Minaloosa, dry-----	20	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Rs2: Reggear, moist-----	40	Very limited Slope Depth to saturated zone Dusty	1.00 0.72 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.39 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.72 0.03
Stewah-----	25	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Somewhat limited Dusty	0.03	Somewhat limited Dusty	0.03	Somewhat limited Low exchange capacity Flooding Dusty	0.75 0.60 0.03
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Low exchange capacity Flooding Dusty	1.00 0.75 0.60 0.03
116: Thatuna-----	45	Somewhat limited Dusty	0.25	Somewhat limited Dusty	0.25	Somewhat limited Dusty Depth to saturated zone	0.25 0.02
Caldwell-----	35	Somewhat limited Depth to saturated zone Dusty	0.73 0.25	Somewhat limited Depth to saturated zone Dusty	0.73 0.25	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.25
118: Thatuna-----	50	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Dusty Depth to saturated zone	0.22 0.02
Cald-----	30	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.22	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.22	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.22
120: Latahco-----	80	Somewhat limited Depth to saturated zone Dusty	0.73 0.07	Somewhat limited Depth to saturated zone Dusty	0.73 0.07	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.07
121: Latahco-----	60	Somewhat limited Depth to saturated zone Dusty	0.73 0.07	Somewhat limited Depth to saturated zone Dusty	0.73 0.07	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121: Lovell-----	30	Somewhat limited Depth to saturated zone Dusty	0.94 0.07	Somewhat limited Depth to saturated zone Dusty	0.94 0.07	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.07
122: Tilma-----	45	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Depth to saturated zone Dusty	0.56 0.22
Latah-----	40	Somewhat limited Depth to saturated zone Dusty	0.44 0.22	Somewhat limited Depth to saturated zone Dusty	0.44 0.22	Somewhat limited Depth to saturated zone Flooding Low exchange capacity Dusty	0.75 0.60 0.50 0.22
124: Caldwell-----	60	Somewhat limited Depth to saturated zone Dusty	0.73 0.25	Somewhat limited Depth to saturated zone Dusty	0.73 0.25	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.25
Cald-----	25	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.25	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.25	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.25
125: Lovell-----	55	Somewhat limited Depth to saturated zone Dusty	0.94 0.02	Somewhat limited Depth to saturated zone Dusty	0.94 0.02	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.02
Porrett-----	20	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
Aquandic Endoaquepts	15	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
130: Porrett-----	80	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.01
136: Lovell-----	45	Somewhat limited Depth to saturated zone Dusty	0.94 0.02	Somewhat limited Depth to saturated zone Dusty	0.94 0.02	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.02
Porrett-----	40	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
141: Miesen-----	80	Somewhat limited Dusty	0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
142: Miesen-----	45	Somewhat limited Dusty	0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
Ramsdell-----	40	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.04
143: Miesen, protected, drained-----	80	Somewhat limited Dusty	0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
144: Miesen, protected, drained-----	50	Somewhat limited Dusty	0.04	Somewhat limited Dusty	0.04	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
144: Ramsdell, protected, drained	35	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Low exchange capacity Flooding Dusty	1.00 0.75 0.60 0.03
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Organic matter content Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Organic matter content Dusty	1.00 1.00 0.03	Very limited Organic matter content Depth to saturated zone Flooding Dusty	1.00 1.00 0.60 0.03
155: Ramsdell-----	80	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.04	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.04
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157: DeVoignes, protected, drained	30	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
158: DeVoignes-----	45	Very limited Depth to saturated zone Ponding Flooding Dusty	1.00 1.00 0.40 0.04	Very limited Depth to saturated zone Ponding Flooding Dusty	1.00 1.00 0.40 0.04	Very limited Ponding Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 1.00 0.50 0.04
Pywell-----	40	Very limited Depth to saturated zone Organic matter content Ponding Flooding Dusty	1.00 1.00 1.00 0.40 0.04	Very limited Depth to saturated zone Organic matter content Ponding Flooding Dusty	1.00 1.00 1.00 0.40 0.04	Very limited Ponding Flooding Organic matter content Depth to saturated zone Dusty	1.00 1.00 1.00 1.00 0.04
200: Blinn, stony surface	80	Somewhat limited Slope Dusty	0.50 0.02	Somewhat limited Dusty	0.02	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
201: Blinn, stony surface	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
202: Blinn, stony surface	55	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
Bobbitt, stony surface-----	30	Very limited Slope Dusty	1.00 0.08	Very limited Slope Dusty	1.00 0.08	Very limited Slope Depth to bedrock Large stones content Droughty Dusty	1.00 0.95 0.79 0.21 0.08

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
210: Agatha, stony surface-----	80	Somewhat limited Slope Dusty	0.50 0.03	Somewhat limited Dusty	0.03	Very limited Slope Dusty	1.00 0.03
212: Agatha, stony surface-----	80	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Gravel content Dusty	1.00 0.32 0.03
230: Lacy, stony surface	65	Very limited Slope Dusty	1.00 0.10	Somewhat limited Dusty	0.10	Very limited Depth to bedrock Slope Droughty Large stones content Dusty	1.00 1.00 0.84 0.39 0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Depth to bedrock Droughty Large stones content Dusty	1.00 1.00 1.00 0.79 0.07
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Slope Dusty	1.00 0.10	Somewhat limited Dusty	0.10	Very limited Depth to bedrock Slope Droughty Large stones content Dusty	1.00 1.00 0.84 0.39 0.10
Bobbitt, stony surface-----	30	Somewhat limited Slope Dusty	0.50 0.10	Somewhat limited Dusty	0.10	Very limited Slope Depth to bedrock Large stones content Droughty Dusty	1.00 0.95 0.79 0.21 0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233: Lacy, very stony surface-----	55	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Depth to bedrock Droughty Large stones content Dusty	1.00 1.00 1.00 0.79 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Large stones content Dusty	1.00 0.19 0.07	Very limited Slope Large stones content Depth to bedrock Dusty	1.00 0.88 0.21 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Large stones content Dusty	1.00 0.84 0.01
255: Shayhill, stony surface-----	80	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 0.22 0.02	Very limited Slope Dusty	1.00 0.02
256: Shayhill, stony surface-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.57 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Dusty	1.00 0.03	Somewhat limited Slope Dusty	0.78 0.03	Very limited Slope Gravel content Dusty	1.00 0.57 0.03
260: Seddow-----	80	Very limited Slope Dusty	1.00 0.02	Somewhat limited Dusty	0.02	Very limited Slope Dusty	1.00 0.02
261: sly, dry-----	45	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
261: Shayhill, dry-----	40	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
262: Seddow-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Sly, dry-----	40	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
300: Taney-----	80	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.88 0.04
301: Taney-----	80	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04
303: Carlinton-----	45	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Low exchange capacity Slope Dusty	0.96 0.50 0.16 0.04
Benewah-----	40	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.04	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.04	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.94 0.63 0.50 0.04
304: Benewah-----	45	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.03	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.03	Very limited Slope Depth to saturated zone Low exchange capacity Dusty	1.00 0.94 0.50 0.03
Santa-----	35	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.03	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.03	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
310: Santa-----	80	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.96 0.04
311: Santa-----	80	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.04	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.04
314: Sharptop-----	45	Very limited Water erosion Dusty	1.00 0.02	Very limited Water erosion Dusty	1.00 0.02	Somewhat limited Slope Dusty	0.63 0.02
Santa-----	40	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.92 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.02
315: Setters-----	80	Somewhat limited Depth to saturated zone Dusty	0.86 0.04	Somewhat limited Depth to saturated zone Dusty	0.86 0.04	Somewhat limited Depth to saturated zone Dusty	0.94 0.04
316: Setters-----	50	Somewhat limited Depth to saturated zone Dusty	0.86 0.04	Somewhat limited Depth to saturated zone Dusty	0.86 0.04	Somewhat limited Depth to saturated zone Dusty	0.94 0.04
Taney-----	30	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04
320: Reggear-----	80	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02
321: Reggear, moist-----	80	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.01	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.01	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
322: Reggear, moist-----	50	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02
Sly-----	30	Very limited Water erosion Slope Dusty	1.00 0.50 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
323: Bechtel-----	50	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 0.22 0.02	Very limited Slope Dusty	1.00 0.02
Reggear-----	35	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 0.92 0.18 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.56 0.02
325: Reggear-----	55	Somewhat limited Depth to saturated zone Dusty	0.18 0.02	Somewhat limited Depth to saturated zone Dusty	0.18 0.02	Somewhat limited Depth to saturated zone Dusty	0.56 0.02
Sharptop, basalt substratum-----	30	Somewhat limited Dusty	0.02	Somewhat limited Dusty	0.02	Somewhat limited Dusty	0.02
326: Reggear-----	50	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.18 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02
Seddow-----	35	Somewhat limited Dusty	0.02	Somewhat limited Dusty	0.02	Very limited Slope Dusty	1.00 0.02
330: Carlinton-----	50	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Low exchange capacity Slope Dusty	0.96 0.50 0.16 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
330: Carlinton, dry-----	30	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.96 0.63 0.50 0.04
335: Carlinton, dry-----	80	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.96 0.84 0.50 0.04
336: Carlinton, dry-----	55	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Dusty	0.92 0.04	Somewhat limited Depth to saturated zone Low exchange capacity Dusty	0.96 0.50 0.04
Taney-----	25	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.73 0.04	Somewhat limited Depth to saturated zone Dusty	0.88 0.04
340: Arson-----	45	Very limited Slope Dusty	1.00 0.02	Somewhat limited Slope Dusty	0.22 0.02	Very limited Slope Dusty	1.00 0.02
Lotuspoint-----	35	Very limited Slope Dusty	1.00 0.05	Somewhat limited Slope Dusty	0.22 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
341: Sinkler-----	45	Very limited Water erosion Slope Dusty	1.00 0.98 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Arson-----	40	Very limited Slope Dusty	1.00 0.02	Somewhat limited Slope Dusty	0.22 0.02	Very limited Slope Dusty	1.00 0.02
342: Sinkler, dry-----	45	Very limited Water erosion Slope Dusty	1.00 0.98 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
342: Arson, dry-----	40	Very limited Slope Dusty	1.00 0.02	Somewhat limited Slope Dusty	0.22 0.02	Very limited Slope Dusty	1.00 0.02
350: Southwick-----	80	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Low exchange capacity Dusty Depth to saturated zone	0.50 0.19 0.06
351: Southwick-----	80	Very limited Water erosion Dusty	1.00 0.19	Very limited Water erosion Dusty	1.00 0.19	Somewhat limited Slope Low exchange capacity Dusty Depth to saturated zone	0.63 0.50 0.19 0.06
353: Tensed-----	50	Somewhat limited Dusty Depth to saturated zone	0.04 0.04	Somewhat limited Dusty Depth to saturated zone	0.04 0.04	Somewhat limited Low exchange capacity Depth to saturated zone Dusty	0.50 0.35 0.04
Pedee-----	35	Somewhat limited Depth to saturated zone Dusty	0.11 0.04	Somewhat limited Depth to saturated zone Dusty	0.11 0.04	Somewhat limited Depth to saturated zone Dusty	0.48 0.04
354: Tensed-----	50	Very limited Water erosion Slope Dusty Depth to saturated zone	1.00 0.18 0.04 0.04	Very limited Water erosion Dusty Depth to saturated zone	1.00 0.04 0.04	Very limited Slope Low exchange capacity Depth to saturated zone Dusty	1.00 0.50 0.35 0.04
Pedee-----	35	Somewhat limited Slope Depth to saturated zone Dusty	0.50 0.11 0.04	Somewhat limited Depth to saturated zone Dusty	0.11 0.04	Very limited Slope Depth to saturated zone Dusty	1.00 0.48 0.04
355: Southwick-----	55	Very limited Water erosion Dusty	1.00 0.19	Very limited Water erosion Dusty	1.00 0.19	Somewhat limited Low exchange capacity Dusty Depth to saturated zone Slope	0.50 0.19 0.06 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
355: Driscoll-----	30	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Depth to saturated zone Dusty	0.35 0.19
356: Southwick-----	55	Very limited Water erosion Dusty Slope	1.00 0.19 0.18	Very limited Water erosion Dusty	1.00 0.19	Very limited Slope Low exchange capacity Dusty Depth to saturated zone	1.00 0.50 0.19 0.06
Driscoll-----	30	Somewhat limited Slope Dusty Depth to saturated zone	0.32 0.19 0.04	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Very limited Slope Depth to saturated zone Dusty	1.00 0.35 0.19
360: Larkin-----	80	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
361: Larkin-----	80	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Very limited Slope Dusty	1.00 0.19
363: Larkin-----	55	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Driscoll-----	30	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Depth to saturated zone Dusty Slope	0.35 0.19 0.04
364: Larkin-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Southwick-----	35	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Low exchange capacity Dusty Depth to saturated zone	0.50 0.19 0.06
367: Larkin-----	55	Somewhat limited Slope Dusty	0.68 0.19	Somewhat limited Dusty	0.19	Very limited Slope Dusty	1.00 0.19
Driscoll-----	30	Somewhat limited Slope Dusty Depth to saturated zone	0.32 0.19 0.04	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Very limited Slope Depth to saturated zone	1.00 0.35

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
400: Driscoll-----	80	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Dusty Depth to saturated zone	0.19 0.04	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.35 0.19
405: Thatuna-----	45	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02
Naff-----	40	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Somewhat limited Slope Dusty	0.63 0.22
406: Thatuna-----	50	Very limited Slope Dusty	1.00 0.22	Somewhat limited Slope Dusty	0.44 0.22	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.02
Naff-----	40	Very limited Slope Water erosion Dusty	1.00 1.00 0.22	Very limited Water erosion Dusty Slope	1.00 0.22 0.08	Very limited Slope Dusty	1.00 0.22
410: Palouse-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Naff-----	35	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
411: Palouse-----	80	Very limited Water erosion Dusty	1.00 0.19	Very limited Water erosion Dusty	1.00 0.19	Somewhat limited Slope Dusty	0.63 0.19
414: Naff-----	45	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22
Thatuna-----	40	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Dusty Depth to saturated zone	0.22 0.02
415: Naff-----	50	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Somewhat limited Dusty Slope	0.22 0.16
Tilma-----	35	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Depth to saturated zone Dusty Slope	0.56 0.22 0.16

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
416: Naff-----	45	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Somewhat limited Slope Dusty	0.63 0.22
Thatuna-----	40	Somewhat limited Dusty	0.22	Somewhat limited Dusty	0.22	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02
417: Naff-----	45	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Somewhat limited Slope Dusty	0.63 0.22
Palouse-----	40	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22
420: Garfield-----	45	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22
Tilma-----	35	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Dusty Depth to saturated zone	0.22 0.18	Somewhat limited Depth to saturated zone Dusty	0.56 0.22
421: Naff-----	55	Very limited Water erosion Dusty	1.00 0.22	Very limited Water erosion Dusty	1.00 0.22	Somewhat limited Dusty Slope	0.22 0.16
Garfield-----	30	Very limited Water erosion Dusty Slope	1.00 0.22 0.18	Very limited Water erosion Dusty	1.00 0.22	Very limited Slope Dusty	1.00 0.22
500: Hobo-----	50	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 0.50 0.44 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.44 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02
Threebear-----	35	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.78 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.78 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.90 0.63 0.02
501: Hobo, warm-----	45	Very limited Slope Water erosion Depth to saturated zone Dusty	1.00 1.00 0.44 0.44 0.01	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.44 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Threebear, warm-----	40	Very limited Depth to saturated zone Water erosion Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Water erosion Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
510: Honeyjones-----	45	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 0.08 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Dusty	1.00 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
600: Ardenvoir-----	50	Very limited Slope Dusty	1.00 0.01	Somewhat limited Slope Dusty	0.22 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	35	Somewhat limited Slope Dusty	0.50 0.01	Somewhat limited Dusty	0.01	Very limited Slope Dusty	1.00 0.01
601: Ardenvoir-----	55	Very limited Slope Dusty	1.00 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
McCrosket-----	25	Very limited Slope Dusty	1.00 0.02	Somewhat limited Dusty	0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
605: Benewah-----	45	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.03	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.86 0.03	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.94 0.63 0.50 0.03
Rasser-----	35	Somewhat limited Dusty	0.03	Somewhat limited Dusty	0.03	Somewhat limited Slope Dusty	0.63 0.03
606: Benewah-----	45	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 1.00 0.86 0.03	Very limited Water erosion Depth to saturated zone Dusty Slope	1.00 0.86 0.03 0.01	Very limited Slope Depth to saturated zone Low exchange capacity Dusty	1.00 0.94 0.50 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
606: Rasser-----	40	Very limited Slope Dusty	1.00 0.03	Somewhat limited Slope Dusty	0.14 0.03	Very limited Slope Dusty	1.00 0.03
610: Schumacher-----	80	Somewhat limited Dusty	0.14	Somewhat limited Dusty	0.14	Somewhat limited Slope Dusty	0.63 0.14
611: Schumacher-----	45	Very limited Slope Dusty	1.00 0.15	Somewhat limited Slope Dusty	0.22 0.15	Very limited Slope Dusty	1.00 0.15
Tekoa-----	40	Very limited Slope Dusty	1.00 0.15	Somewhat limited Slope Dusty	0.56 0.15	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.15 0.04
612: Libertybutte-----	45	Very limited Slope Dusty	1.00 0.17	Somewhat limited Dusty	0.17	Very limited Depth to bedrock Slope Droughty Gravel content Dusty	1.00 1.00 0.97 0.68 0.17
Tekoa-----	40	Very limited Slope Dusty	1.00 0.17	Somewhat limited Dusty Slope	0.17 0.14	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.17 0.04
613: Ardenvoir, dry-----	50	Somewhat limited Slope Dusty	0.50 0.02	Somewhat limited Dusty	0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Lotuspoint-----	35	Somewhat limited Dusty	0.05	Somewhat limited Dusty	0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
614: Ardenvoir, dry-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
614: Lotuspoint-----	35	Very limited Slope Dusty	1.00 0.05	Very limited Slope Dusty	1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
617: Tekoa-----	80	Very limited Slope Dusty	1.00 0.15	Somewhat limited Dusty Slope	0.15 0.08	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.15 0.04
621: Huckle-----	80	Very limited Slope Dusty	1.00 0.01	Somewhat limited Slope Dusty	0.08 0.01	Very limited Slope Dusty	1.00 0.01
625: Huckle-----	45	Very limited Slope Dusty	1.00 0.01	Somewhat limited Slope Dusty	0.08 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	40	Very limited Slope Dusty	1.00 0.01	Somewhat limited Slope Dusty	0.22 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
650: Grangemont-----	80	Very limited Water erosion Dusty	1.00 0.01	Very limited Water erosion Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
651: Kingspeak-----	55	Very limited Water erosion Slope Dusty	1.00 0.50 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Shayhill, stony surface-----	30	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 0.22 0.02	Very limited Slope Dusty	1.00 0.02
652: Kingspeak-----	80	Very limited Water erosion Dusty	1.00 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
653: Kingspeak, cool----	80	Very limited Water erosion Slope Dusty	1.00 0.18 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
655: Tigley, moist-----	80	Very limited Slope Dusty	1.00 0.02	Somewhat limited Slope Dusty	0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02
656: Kingspeak, dry-----	80	Very limited Water erosion Slope Dusty	1.00 0.18 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
660: Threebear-----	80	Somewhat limited Depth to saturated zone Dusty	0.78 0.01	Somewhat limited Depth to saturated zone Dusty	0.78 0.01	Somewhat limited Depth to saturated zone Dusty	0.90 0.01
662: Threebear, warm-----	80	Very limited Depth to saturated zone Water erosion Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Water erosion Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01
663: Threebear, warm-----	50	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01
Porrett-----	35	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.01
665: Grangemont, warm-----	80	Very limited Water erosion Dusty	1.00 0.01	Very limited Water erosion Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
670: Honeyjones, warm-----	80	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 0.08 0.01	Very limited Slope Dusty	1.00 0.01
671: Honeyjones-----	80	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 0.08 0.01	Very limited Slope Dusty	1.00 0.01
680: Ardenvoir-----	45	Somewhat limited Dusty	0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680: Huckle-----	40	Somewhat limited Dusty	0.01	Somewhat limited Dusty	0.01	Very limited Slope Dusty	1.00 0.01
681: Huckle-----	45	Somewhat limited Dusty	0.01	Somewhat limited Dusty	0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Somewhat limited Dusty	0.01	Somewhat limited Dusty	0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
700: Ardenvoir-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
701: Ardenvoir-----	55	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
McCrosket-----	25	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
703: Ardenvoir, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Ardenvoir-----	40	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Dusty	1.00 0.02	Somewhat limited Dusty	0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Ardenvoir-----	40	Very limited Slope Dusty	1.00 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
705: Ardenvoir-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.32 0.02
Rasser-----	30	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
706: Ardenvoir-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
707: Huckle, dry-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
710: McCrosket-----	50	Somewhat limited Slope Dusty	0.98 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
Ardenvoir-----	30	Very limited Slope Dusty	1.00 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
711: McCrosket-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
Ardenvoir-----	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
712: McCrosket-----	50	Very limited Slope Dusty	1.00 0.05	Very limited Slope Dusty	1.00 0.05	Very limited Slope Gravel content Dusty	1.00 0.92 0.05
Tekoa-----	30	Very limited Slope Dusty	1.00 0.12	Very limited Slope Dusty	1.00 0.12	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.12 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
716: Ahrens-----	80	Very limited Slope Dusty	1.00 0.01	Somewhat limited Dusty	0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
720: Huckle-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
721: Huckle-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
735: Lotuspoint, stony surface-----	80	Very limited Slope Dusty	1.00 0.04	Very limited Slope Dusty	1.00 0.04	Very limited Slope Depth to bedrock Large stones content Droughty Gravel content	1.00 0.80 0.68 0.43 0.16
736: Lotuspoint, stony surface-----	65	Very limited Slope Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03	Very limited Slope Depth to bedrock Large stones content Droughty Gravel content	1.00 0.80 0.68 0.43 0.16
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02
757: Hugus, warm-----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.08 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
758: Hugus-----	35	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
765: Saint Maries-----	45	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Large stones content Dusty Droughty	1.00 0.92 0.08 0.01 0.01
Huckle-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
770: Pinecreek-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
771: Honeyjones, warm----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
772: Honeyjones, warm----	45	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
773: Honeyjones, dry-----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
774: Pinecreek, moist----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
775: Pinecreek, moist----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
776: Cassyhill-----	80	Very limited Slope Gravel content Dusty	1.00 1.00 0.05	Very limited Slope Gravel content Dusty	1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Dusty	1.00 1.00 1.00 1.00 0.05
777: Boulder creek, warm--	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
778: Cassyhill-----	50	Very limited Gravel content Dusty	1.00 0.05	Very limited Gravel content Dusty	1.00 0.05	Very limited Gravel content Depth to bedrock Droughty Slope Dusty	1.00 1.00 1.00 1.00 0.05
Lotuspoint-----	35	Somewhat limited Dusty	0.05	Somewhat limited Dusty	0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
779: Boulder creek-----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
780: Ardenvoir-----	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
Saint Maries, dry---	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
781: Ahrs, moist-----	45	Very limited Slope Large stones content Dusty	1.00 0.02 0.01	Very limited Slope Large stones content Dusty	1.00 0.02 0.01	Very limited Slope Large stones content Gravel content Dusty	1.00 1.00 0.03 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
781: Honeyjones, warm----	35	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Cassyhill-----	35	Very limited Slope Gravel content Dusty	1.00 1.00 0.05	Very limited Slope Gravel content Dusty	1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Dusty	1.00 1.00 1.00 1.00 0.05
784: Pinecreek, moist----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
Lotuspoint-----	35	Very limited Slope Dusty	1.00 0.04	Very limited Slope Dusty	1.00 0.04	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
791: Latour-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Large stones content Gravel content	1.00 0.16 0.01
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Very limited Water erosion Slope Dusty	1.00 0.50 0.02	Very limited Water erosion Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
901: Aquadnic Endoaquepts	40	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Depth to saturated zone Flooding Dusty	1.00 0.40 0.02	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
Aquic Udifluvents---	40	Somewhat limited Dusty	0.02	Somewhat limited Dusty	0.02	Somewhat limited Low exchange capacity Flooding Depth to saturated zone Dusty	0.75 0.60 0.12 0.02
902: Ahrs-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
903: Ahrs-----	50	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
Pinecreek-----	30	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
907: Honeyjones-----	80	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
908: Honeyjones-----	45	Very limited Slope Water erosion Dusty	1.00 1.00 0.01	Very limited Water erosion Slope Dusty	1.00 1.00 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
913: Hobo-----	85	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 1.00 0.44 0.02	Very limited Water erosion Depth to saturated zone Slope Dusty	1.00 0.44 0.22 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 20.--Paths, Trails, and Golf Fairways--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ac1: Arson-----	40	Very limited Water erosion Slope Dusty	1.00 1.00 0.04	Very limited Water erosion Dusty	1.00 0.04	Very limited Slope Dusty	1.00 0.04
Carlinton-----	35	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 0.50 0.50 0.02	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.50 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.02
Ac2: Arson, dry-----	45	Very limited Water erosion Slope Dusty	1.00 0.50 0.05	Very limited Water erosion Dusty	1.00 0.05	Very limited Slope Dusty	1.00 0.05
Carlinton, dry-----	30	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 0.50 0.50 0.03	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.50 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.03
An4: Arson, dry-----	55	Very limited Slope Water erosion Dusty	1.00 1.00 0.03	Very limited Water erosion Slope Dusty	1.00 1.00 0.03	Very limited Slope Dusty	1.00 0.03
Minaloosa, dry-----	20	Very limited Slope Water erosion Dusty	1.00 1.00 0.02	Very limited Water erosion Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
Rs2: Reggear, moist-----	40	Very limited Water erosion Slope Depth to saturated zone Dusty	1.00 0.50 0.06 0.03	Very limited Water erosion Depth to saturated zone Dusty	1.00 0.06 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.39 0.03
Stewah-----	25	Very limited Water erosion Slope Dusty	1.00 1.00 0.03	Very limited Water erosion Dusty	1.00 0.03	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
Typic Fluvaquents, protected-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
116: Thatuna-----	45	Somewhat limited Depth to saturated zone	0.03	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.03
Caldwell-----	35	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
118: Thatuna-----	50	Somewhat limited Depth to saturated zone	0.03	Very limited Depth to saturated zone	1.00	Somewhat limited Slope Depth to saturated zone	0.13 0.03
Cald-----	30	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.01	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.08	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.01
120: Latahco-----	80	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.08	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.21	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.08
121: Latahco-----	60	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.08	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.21	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.08
Lovell-----	30	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
122: Tilma-----	45	Somewhat limited Depth to saturated zone Shrink-swell	0.88 0.01	Very limited Depth to saturated zone Shrink-swell	1.00 0.11	Somewhat limited Depth to saturated zone Shrink-swell	0.88 0.01
Latah-----	40	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.27	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.94	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.27
124: Caldwell-----	60	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
Cald-----	25	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
125: Lovell-----	55	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Porrett-----	20	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Aquandic Endoaquepts	15	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
130: Porrett-----	80	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
136: Lovell-----	45	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Porrett-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141: Miesen-----	80	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
142: Miesen-----	45	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
Ramsdell-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
143: Miesen, protected, drained-----	80	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
144: Miesen, protected, drained-----	50	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
Ramsdell, protected, drained	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
145: Bellslake, protected, drained	80	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Organic matter content	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
150: Pywell, protected, drained-----	80	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
155: Ramsdell-----	80	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	unit	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
156: Ramsdell, protected, drained	80	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
157: Ramsdell, protected, drained	50	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
DeVoignes, protected, drained	30	Very limited Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 0.50
158: DeVoignes-----	45	Very limited Ponding Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Subsidence Shrink-swell	1.00 1.00 1.00 1.00 0.50
Pywell-----	40	Very limited Ponding Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00 1.00
200: Blinn, stony surface	80	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.22	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02
201: Blinn, stony surface	80	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 0.22	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02
202: Blinn, stony surface	55	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 0.22	Very limited Slope Large stones Depth to hard bedrock	1.00 0.22 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
202: Bobbitt, stony surface-----	30	Very limited Slope Depth to hard bedrock Large stones	1.00 0.99 0.42	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 0.42	Very limited Slope Depth to hard bedrock Large stones	1.00 0.99 0.42
210: Agatha, stony surface-----	80	Very limited Slope	1.00	Very limited Slope Depth to hard bedrock	1.00 0.99	Very limited Slope	1.00
212: Agatha, stony surface-----	80	Very limited Slope	1.00	Very limited Slope Depth to hard bedrock	1.00 0.99	Very limited Slope	1.00
230: Lacy, stony surface	65	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.82
Bobbitt, stony surface-----	30	Very limited Slope Depth to hard bedrock Large stones	1.00 0.99 0.42	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.42	Very limited Slope Depth to hard bedrock Large stones	1.00 0.99 0.42

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233: Lacy, very stony surface-----	55	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00
Bobbitt, very stony surface-----	30	Very limited Slope Large stones Depth to hard bedrock	1.00 0.82 0.35	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 0.82	Very limited Slope Large stones Depth to hard bedrock	1.00 0.82 0.35
250: Dorb, warm, stony surface-----	80	Very limited Slope Large stones	1.00 0.73	Very limited Slope Depth to hard bedrock Large stones	1.00 0.77 0.73	Very limited Slope Large stones	1.00 0.73
255: Shayhill, stony surface-----	80	Very limited Slope Large stones	1.00 0.18	Very limited Slope Large stones	1.00 0.18	Very limited Slope Large stones	1.00 0.18
256: Shayhill, stony surface-----	80	Very limited Slope Large stones	1.00 0.15	Very limited Slope Large stones	1.00 0.15	Very limited Slope Large stones	1.00 0.15
257: Shayhill, dry, stony surface-----	80	Very limited Slope Large stones	1.00 0.23	Very limited Slope Large stones	1.00 0.23	Very limited Slope Large stones	1.00 0.23
260: Seddow-----	80	Very limited Slope Shrink-swell	1.00 0.25	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.93 0.27	Very limited Slope Shrink-swell	1.00 0.25
261: sly, dry-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Shayhill, dry-----	40	Very limited Slope Large stones	1.00 0.24	Very limited Slope Large stones	1.00 0.24	Very limited Slope Large stones	1.00 0.24

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
262: Seddow-----	45	Very limited Slope Shrink-swell	1.00 0.25	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.93 0.27	Very limited Slope Shrink-swell	1.00 0.25
Sly, dry-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
300: Taney-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.13
301: Taney-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Slope Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00
303: Carlinton-----	45	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 0.54 0.50 0.16	Very limited Depth to saturated zone Depth to thin cemented pan Slope	1.00 1.00 0.16	Very limited Slope Depth to saturated zone Depth to thin cemented pan Depth to thick cemented pan	1.00 1.00 1.00 0.54
Benewah-----	40	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 1.00
304: Benewah-----	45	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00
Santa-----	35	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Slope Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
310: Santa-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.13
311: Santa-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Slope Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00 1.00
314: Sharptop-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Santa-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Slope Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00 1.00
315: Setters-----	80	Very limited Depth to saturated zone Shrink-swell	1.00 0.78	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Slope Shrink-swell	1.00 1.00 0.78
316: Setters-----	50	Very limited Depth to saturated zone Shrink-swell	1.00 0.78	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Slope Shrink-swell	1.00 1.00 0.78
Taney-----	30	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
320: Reggear-----	80	Very limited Depth to thick cemented pan Depth to saturated zone Slope Depth to thin cemented pan	1.00 0.88 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Slope Depth to saturated zone	1.00 1.00 1.00 1.00 0.88
321: Reggear, moist-----	80	Very limited Depth to thick cemented pan Depth to saturated zone Slope Depth to thin cemented pan	1.00 0.88 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Slope Depth to saturated zone	1.00 1.00 1.00 1.00 0.88
322: Reggear, moist-----	50	Very limited Depth to thick cemented pan Depth to saturated zone Slope Depth to thin cemented pan	1.00 0.88 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Slope Depth to saturated zone	1.00 1.00 1.00 1.00 0.88
Sly-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
323: Bechtel-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Reggear-----	35	Very limited Slope Depth to thick cemented pan Depth to saturated zone Depth to thin cemented pan	1.00 1.00 0.88 0.50	Very limited Slope Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00 1.00	Very limited Slope Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 0.88
325: Reggear-----	55	Very limited Depth to thick cemented pan Depth to saturated zone Depth to thin cemented pan	1.00 0.88 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.88 0.13
Sharptop, basalt substratum-----	30	Not limited		Not limited		Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
326: Reggear-----	50	Very limited Depth to thick cemented pan 1.00 Depth to saturated zone 0.88 Slope 0.63 Depth to thin cemented pan 0.50		Very limited Depth to saturated zone 1.00 Depth to thick cemented pan 1.00 Depth to thin cemented pan 1.00 Slope 0.63		Very limited Depth to thick cemented pan 1.00 Depth to thin cemented pan 1.00 Slope 1.00 Depth to saturated zone 0.88	
Seddow-----	35	Very limited Slope 1.00 Shrink-swell 0.25		Very limited Slope 1.00 Depth to hard bedrock 0.93 Shrink-swell 0.27		Very limited Slope 1.00 Shrink-swell 0.25	
330: Carlinton-----	50	Very limited Depth to saturated zone 1.00 Depth to thick cemented pan 0.54 Depth to thin cemented pan 0.50 Slope 0.16		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Slope 0.16		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Slope 1.00 Depth to thick cemented pan 0.54	
Carlinton, dry-----	30	Very limited Depth to saturated zone 1.00 Slope 0.63 Depth to thick cemented pan 0.54 Depth to thin cemented pan 0.50		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Slope 0.63		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Slope 1.00 Depth to thick cemented pan 0.54	
335: Carlinton, dry-----	80	Very limited Depth to saturated zone 1.00 Slope 0.84 Depth to thick cemented pan 0.54 Depth to thin cemented pan 0.50		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Slope 0.84		Very limited Slope 1.00 Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Depth to thick cemented pan 0.54	
336: Carlinton, dry-----	55	Very limited Depth to saturated zone 1.00 Depth to thick cemented pan 0.54 Depth to thin cemented pan 0.50		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00		Very limited Depth to saturated zone 1.00 Depth to thin cemented pan 1.00 Depth to thick cemented pan 0.54 Slope 0.13	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
336: Taney-----	25	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.13
340: Arson-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
341: Sinkler-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Arson-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
342: Sinkler, dry-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Arson, dry-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
350: Southwick-----	80	Somewhat limited Depth to saturated zone	0.13	Very limited Depth to saturated zone Shrink-swell	1.00 0.01	Somewhat limited Depth to saturated zone Slope	0.13 0.13
351: Southwick-----	80	Somewhat limited Slope Depth to saturated zone	0.63 0.13	Very limited Depth to saturated zone Slope Shrink-swell	1.00 0.63 0.01	Very limited Slope Depth to saturated zone	1.00 0.13
353: Tensed-----	50	Somewhat limited Depth to saturated zone Shrink-swell	0.67 0.01	Very limited Depth to saturated zone Shrink-swell	1.00 0.07	Somewhat limited Depth to saturated zone Slope Shrink-swell	0.67 0.13 0.01
Pedee-----	35	Somewhat limited Depth to saturated zone Shrink-swell	0.81 0.02	Very limited Depth to saturated zone Shrink-swell	1.00 0.13	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.81 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
354: Tensed-----	50	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.01	Very limited Slope Depth to saturated zone Shrink-swell	1.00 1.00 0.09	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.01
Pedee-----	35	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.81 0.02	Very limited Slope Depth to saturated zone Shrink-swell	1.00 1.00 0.13	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.81 0.02
355: Southwick-----	55	Somewhat limited Depth to saturated zone Slope	0.13 0.04	Very limited Depth to saturated zone Slope Shrink-swell	1.00 1.00 0.04 0.01	Very limited Slope Depth to saturated zone	1.00 0.13
Driscoll-----	30	Somewhat limited Shrink-swell Depth to saturated zone	0.75 0.67	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Somewhat limited Slope Shrink-swell Depth to saturated zone	0.88 0.75 0.67
356: Southwick-----	55	Very limited Slope Depth to saturated zone	1.00 0.13	Very limited Slope Depth to saturated zone Shrink-swell	1.00 1.00 0.01	Very limited Slope Depth to saturated zone	1.00 0.13
Driscoll-----	30	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.53	Very limited Slope Depth to saturated zone Shrink-swell	1.00 1.00 0.98	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.53
360: Larkin-----	80	Somewhat limited Shrink-swell	0.25	Somewhat limited Shrink-swell	0.34	Somewhat limited Slope Shrink-swell	0.88 0.25
361: Larkin-----	80	Very limited Slope Shrink-swell	1.00 0.25	Very limited Slope Shrink-swell	1.00 0.34	Very limited Slope Shrink-swell	1.00 0.25
363: Larkin-----	55	Somewhat limited Shrink-swell	0.25	Somewhat limited Shrink-swell	0.34	Somewhat limited Slope Shrink-swell	0.50 0.25
Driscoll-----	30	Somewhat limited Depth to saturated zone Shrink-swell Slope	0.67 0.53 0.04	Very limited Depth to saturated zone Shrink-swell Slope	1.00 0.98 0.04	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.53

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
364: Larkin-----	50	Somewhat limited Shrink-swell	0.25	Somewhat limited Shrink-swell	0.34	Somewhat limited Slope Shrink-swell	0.88 0.25
Southwick-----	35	Somewhat limited Depth to saturated zone	0.13	Very limited Depth to saturated zone Shrink-swell	1.00 0.01	Somewhat limited Slope Depth to saturated zone	0.50 0.13
367: Larkin-----	55	Very limited Slope Shrink-swell	1.00 0.25	Very limited Slope Shrink-swell	1.00 0.34	Very limited Slope Shrink-swell	1.00 0.25
Driscoll-----	30	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.33	Very limited Depth to saturated zone Slope Shrink-swell	1.00 1.00 0.95	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.67 0.33
400: Driscoll-----	80	Somewhat limited Shrink-swell Depth to saturated zone Slope	0.75 0.67 0.63	Very limited Depth to saturated zone Shrink-swell Slope	1.00 1.00 0.63	Very limited Slope Shrink-swell Depth to saturated zone	1.00 0.75 0.67
405: Thatuna-----	45	Somewhat limited Slope Depth to saturated zone	0.96 0.03	Very limited Depth to saturated zone Slope	1.00 0.96	Very limited Slope Depth to saturated zone	1.00 0.03
Naff-----	40	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
406: Thatuna-----	50	Very limited Slope Depth to saturated zone	1.00 0.03	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.03
Naff-----	40	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
410: Palouse-----	50	Not limited		Not limited		Not limited	
Naff-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.13
411: Palouse-----	80	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
414: Naff-----	45	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.13
Thatuna-----	40	Somewhat limited Depth to saturated zone	0.03	Very limited Depth to saturated zone	1.00	Somewhat limited Slope Depth to saturated zone	0.13 0.03
415: Naff-----	50	Somewhat limited Shrink-swell Slope	0.50 0.16	Somewhat limited Shrink-swell Slope	0.50 0.16	Very limited Slope Shrink-swell	1.00 0.50
Tilma-----	35	Somewhat limited Depth to saturated zone Slope Shrink-swell	0.88 0.16 0.01	Very limited Depth to saturated zone Slope Shrink-swell	1.00 0.16 0.11	Very limited Slope Depth to saturated zone Shrink-swell	1.00 0.88 0.01
416: Naff-----	45	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
Thatuna-----	40	Somewhat limited Slope Depth to saturated zone	0.96 0.03	Very limited Depth to saturated zone Slope	1.00 0.96	Very limited Slope Depth to saturated zone	1.00 0.03
417: Naff-----	45	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
Palouse-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
420: Garfield-----	45	Very limited Shrink-swell Slope	1.00 1.00	Very limited Shrink-swell Slope	1.00 1.00	Very limited Shrink-swell Slope	1.00 1.00
Tilma-----	35	Somewhat limited Depth to saturated zone Shrink-swell	0.88 0.01	Very limited Depth to saturated zone Shrink-swell	1.00 0.11	Somewhat limited Depth to saturated zone Slope Shrink-swell	0.88 0.50 0.01
421: Naff-----	55	Somewhat limited Shrink-swell Slope	0.50 0.16	Somewhat limited Shrink-swell Slope	0.50 0.16	Very limited Slope Shrink-swell	1.00 0.50
Garfield-----	30	Very limited Shrink-swell Slope	1.00 1.00	Very limited Shrink-swell Slope	1.00 1.00	Very limited Shrink-swell Slope	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
500: Hobo-----	50	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Threebear-----	35	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 1.00 1.00 0.63 0.01	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00 1.00
501: Hobo, warm-----	45	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Threebear, warm-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00
510: Honeyjones-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ahrs-----	35	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
600: Ardenvoir-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Huckle-----	35	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
601: Ardenvoir-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
McCrosket-----	25	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11
605: Benewah-----	45	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
605: Rasser-----	35	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
606: Benewah-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Rasser-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
610: Schumacher-----	80	Somewhat limited Slope	0.63	Somewhat limited Depth to hard bedrock	0.79	Very limited Slope	1.00
				Slope	0.63		
				Shrink-swell	0.01		
611: Schumacher-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
				Depth to hard bedrock	0.79		
				Shrink-swell	0.01		
Tekoa-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Depth to hard bedrock	0.20	Depth to hard bedrock	1.00	Depth to hard bedrock	0.20
612: Libertybutte-----	45	Very limited Depth to hard bedrock	1.00	Very limited Depth to hard bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	0.50	Slope	1.00	Slope	1.00
Tekoa-----	40	Very limited Slope	1.00	Very limited Depth to hard bedrock	1.00	Very limited Slope	1.00
		Depth to hard bedrock	0.20	Slope	1.00	Depth to hard bedrock	0.20
613: Ardenvoir, dry-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Large stones	0.08	Large stones	0.08	Large stones	0.08
Lotuspoint-----	35	Very limited Slope	1.00	Very limited Depth to hard bedrock	1.00	Very limited Slope	1.00
		Large stones	1.00	Slope	1.00	Large stones	1.00
		Depth to hard bedrock	0.90	Large stones	1.00	Depth to hard bedrock	0.90
614: Ardenvoir, dry-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Large stones	0.08	Large stones	0.08	Large stones	0.08

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
614: Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
617: Tekoa-----	80	Very limited Slope Depth to hard bedrock	1.00 0.20	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.20
621: Huckle-----	80	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
625: Huckle-----	45	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
Ardenvoir-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
650: Grangemont-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
651: Kingspeak-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Shayhill, stony surface-----	30	Very limited Slope Large stones	1.00 0.18	Very limited Slope Large stones	1.00 0.18	Very limited Slope Large stones	1.00 0.18
652: Kingspeak-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
653: Kingspeak, cool-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
655: Tigley, moist-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
656: Kingspeak, dry-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
660: Threebear-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Shrink-swell	1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.50
662: Threebear, warm----	80	Very limited Depth to saturated zone Depth to thick cemented pan Slope Depth to thin cemented pan	1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00
663: Threebear, warm----	50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan	1.00 1.00 1.00
Porrett-----	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
665: Grangemont, warm----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
670: Honeyjones, warm----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
671: Honeyjones-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
680: Ardenvoir-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Huckle-----	40	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
681: Huckle-----	45	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
681: Ahrs-----	35	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
700: Ardenvoir-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Huckle-----	35	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
701: Ardenvoir-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
McCrosket-----	25	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11
703: Ardenvoir, dry-----	45	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08
Ardenvoir-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
704: Ardenvoir, dry-----	45	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08
Ardenvoir-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
705: Ardenvoir-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Rasser-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
706: Ardenvoir-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
707: Huckle, dry-----	50	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
Ardenvoir-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
710: McCrosket-----	50	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
710: Ardenvoir-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
711: McCrosket-----	50	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11
Ardenvoir-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
712: McCrosket-----	50	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11	Very limited Slope Large stones	1.00 0.11
Tekoa-----	30	Very limited Slope Depth to hard bedrock	1.00 0.20	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.20
716: Ahrs-----	80	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
720: Huckle-----	80	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
721: Huckle-----	50	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
Ardenvoir-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
735: Lotuspoint, stony surface-----	80	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
736: Lotuspoint, stony surface-----	65	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
756: Tigley-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
757: Hugus, warm-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
758: Tigley, moist-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Hugus-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
765: Saint Maries-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Huckle-----	35	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
770: Pinecreek-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
771: Honeyjones, warm----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
772: Honeyjones, warm----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ahrs-----	35	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
773: Honeyjones, dry----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
774: Pinecreek, moist----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
775: Pinecreek, moist----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
776: Cassyhill-----	80	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
777: Boulder creek, warm--	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
778: Cassychill-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
779: Bouldercreek-----	80	Very limited Slope Large stones	1.00 0.06	Very limited Slope Large stones	1.00 0.06	Very limited Slope Large stones	1.00 0.06
780: Ardenvoir-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Huckle-----	30	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02	Very limited Slope Large stones	1.00 0.02
Saint Maries, dry---	30	Very limited Slope Large stones	1.00 0.81	Very limited Slope Large stones	1.00 0.81	Very limited Slope Large stones	1.00 0.81
781: Ahrs, moist-----	45	Very limited Slope Large stones	1.00 0.04	Very limited Slope Large stones	1.00 0.04	Very limited Slope Large stones	1.00 0.04
Honeyjones, warm----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
782: Ardenvoir, dry-----	45	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08	Very limited Slope Large stones	1.00 0.08
Cassychill-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
784: Pinecreek, moist----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90	Very limited Slope Depth to hard bedrock Large stones	1.00 1.00 1.00	Very limited Slope Large stones Depth to hard bedrock	1.00 1.00 0.90
791: Latour-----	80	Very limited Slope Large stones	1.00 0.97	Very limited Slope Large stones	1.00 0.97	Very limited Slope Large stones	1.00 0.97

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Aquic Udifluvents---	40	Very limited Flooding Depth to saturated zone	1.00 0.24	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.24
902: Ahrs-----	80	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
903: Ahrs-----	50	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
Pinecreek-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
907: Honeyjones-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
908: Honeyjones-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ahrs-----	35	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01	Very limited Slope Large stones	1.00 0.01
913: Hobo-----	85	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Acl: Arson-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 21.--Dwellings and Small Commercial Buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ac1: Carlinton-----	35	Very limited Depth to thick cemented pan Slope Depth to saturated zone Depth to thin cemented pan	1.00 1.00 0.99 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope	1.00 1.00 1.00 1.00 1.00	Very limited Slope Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone	1.00 1.00 1.00 0.99
Ac2: Arson, dry-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Carlinton, dry-----	30	Very limited Depth to thick cemented pan Slope Depth to saturated zone Depth to thin cemented pan	1.00 1.00 0.99 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 1.00 1.00 1.00 0.01	Very limited Slope Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone	1.00 1.00 1.00 0.99
An4: Arson, dry-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Minaloosa, dry-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Rs2: Reggear, moist-----	40	Very limited Depth to thick cemented pan Slope Depth to saturated zone Shrink-swell Depth to thin cemented pan	1.00 1.00 0.72 0.64 0.50	Very limited Depth to saturated zone Depth to thick cemented pan Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 1.00 1.00 1.00 0.99	Very limited Slope Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.72 0.64
Stewah-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.---Roads and Streets, Shallow Excavations, and Lawns and Landscaping

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Flooding Frost action	1.00 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.03 0.01	Somewhat limited Low exchange capacity Flooding Dusty	0.75 0.60 0.03
Typic Fluvaquents, protected-----	40	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.03 0.01	Very limited Depth to saturated zone Low exchange capacity Flooding Dusty	1.00 0.75 0.60 0.03
116: Thatuna-----	45	Very limited Frost action Low strength Depth to saturated zone	1.00 1.00 0.02	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.25 0.01	Somewhat limited Dusty Depth to saturated zone	0.25 0.02
Caldwell-----	35	Very limited Frost action Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.88 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.25 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.25
118: Thatuna-----	50	Very limited Frost action Low strength Depth to saturated zone	1.00 1.00 0.02	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.22 0.01	Somewhat limited Dusty Depth to saturated zone	0.22 0.02
Cald-----	30	Very limited Depth to saturated zone Frost action Flooding Low strength Shrink-swell	1.00 1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.80 0.22 0.01	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
120: Latahco-----	80	Very limited Frost action Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.88 0.08	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.07 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.07
121: Latahco-----	60	Very limited Frost action Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.88 0.08	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.07 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.07
Lovell-----	30	Very limited Frost action Flooding Low strength Depth to saturated zone	1.00 1.00 1.00 0.98	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.07 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.07
122: Tilma-----	45	Very limited Low strength Depth to saturated zone Frost action Shrink-swell	1.00 0.56 0.50 0.01	Very limited Depth to saturated zone Dusty Too clayey Unstable excavation walls	1.00 0.22 0.02 0.01	Somewhat limited Depth to saturated zone Dusty	0.56 0.22
Latah-----	40	Very limited Frost action Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.75 0.27	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.22 0.01	Somewhat limited Depth to saturated zone Flooding Low exchange capacity Dusty	0.75 0.60 0.50 0.22
124: Caldwell-----	60	Very limited Frost action Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.88 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.25 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.88 0.60 0.25
Cald-----	25	Very limited Depth to saturated zone Frost action Flooding Low strength Shrink-swell	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.25 0.01	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.25

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
125: Lovell-----	55	Very limited Frost action Flooding Low strength Depth to saturated zone	1.00 1.00 1.00 0.98	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.02 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.02
Porrett-----	20	Very limited Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.02 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
Aquandic Endoaquepts	15	Very limited Depth to saturated zone Flooding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.02 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
130: Porrett-----	80	Very limited Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.01 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.01
136: Lovell-----	45	Very limited Frost action Flooding Low strength Depth to saturated zone	1.00 1.00 1.00 0.98	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.02 0.01	Somewhat limited Depth to saturated zone Flooding Dusty	0.98 0.60 0.02
Porrett-----	40	Very limited Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.02 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
141: Miesen-----	80	Very limited Frost action Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.04 0.01	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142: Miesen-----	45	Very limited Frost action Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
Ramsdell-----	40	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.80 0.04 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.04
143: Miesen, protected, drained-----	80	Very limited Frost action Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
144: Miesen, protected, drained-----	50	Very limited Frost action Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Somewhat limited Flooding Low exchange capacity Dusty	0.60 0.50 0.04
Ramsdell, protected, drained	35	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
145: Bellslake, protected, drained	80	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.03 0.01	Very limited Depth to saturated zone Low exchange capacity Flooding Dusty	1.00 0.75 0.60 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
150: Pywell, protected, drained-----	80	Very limited Depth to saturated zone Subsidence Frost action Flooding Low strength	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Flooding Dusty Unstable excavation walls	1.00 1.00 0.60 0.03 0.01	Very limited Organic matter content Depth to saturated zone Flooding Dusty	1.00 1.00 0.60 0.03
155: Ramsdell-----	80	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.80 0.04 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.04
156: Ramsdell, protected, drained	80	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
157: Ramsdell, protected, drained	50	Very limited Depth to saturated zone Frost action Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
DeVoignes, protected, drained	30	Very limited Depth to saturated zone Frost action Flooding Low strength Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.04 0.01	Very limited Depth to saturated zone Flooding Low exchange capacity Dusty	1.00 0.60 0.50 0.04
158: DeVoignes-----	45	Very limited Ponding Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 1.00 0.80 0.04 0.01	Very limited Ponding Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 1.00 0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158: Pywell-----	40	Very limited Ponding Depth to saturated zone Subsidence Frost action Flooding	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Flooding Dusty	1.00 1.00 1.00 1.00 0.80 0.04	Very limited Ponding Flooding Organic matter content Depth to saturated zone Dusty	1.00 1.00 1.00 1.00 1.00 0.04
200: Blinn, stony surface	80	Very limited Slope Frost action Large stones Depth to hard bedrock	1.00 0.50 0.22 0.02	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 1.00 0.22 0.02 0.01	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
201: Blinn, stony surface	80	Very limited Slope Frost action Large stones Depth to hard bedrock	1.00 0.50 0.22 0.02	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 1.00 0.22 0.02 0.01	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
202: Blinn, stony surface	80	Very limited Slope Frost action Large stones Depth to hard bedrock	1.00 0.50 0.22 0.02	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 1.00 0.22 0.02 0.01	Very limited Slope Large stones content Dusty Depth to bedrock	1.00 0.03 0.02 0.01
Bobbitt, stony surface-----	30	Very limited Slope Depth to hard bedrock Frost action Large stones Low strength	1.00 0.99 0.50 0.42 0.22	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 1.00 0.42 0.08 0.01	Very limited Slope Depth to bedrock Large stones content Droughty Dusty	1.00 0.95 0.79 0.21 0.08
210: Agatha, stony surface-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.99 0.03 0.01	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
212: Agatha, stony surface-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.99 0.03 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.03
230: Lacy, stony surface	65	Very limited Depth to hard bedrock Slope Large stones Frost action	1.00 1.00 0.82 0.50	Very limited Depth to hard bedrock Slope Large stones Unstable excavation walls Dusty	1.00 1.00 0.82 0.51 0.10	Very limited Depth to bedrock Slope Droughty Large stones content Dusty	1.00 1.00 0.84 0.39 0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Depth to hard bedrock Slope Large stones Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Unstable excavation walls Dusty	1.00 1.00 1.00 0.29 0.07	Very limited Slope Depth to bedrock Droughty Large stones content Dusty	1.00 1.00 1.00 0.79 0.07
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Depth to hard bedrock Slope Large stones Frost action	1.00 1.00 0.82 0.50	Very limited Depth to hard bedrock Slope Large stones Unstable excavation walls Dusty	1.00 1.00 0.82 0.51 0.10	Very limited Depth to bedrock Slope Droughty Large stones content Dusty	1.00 1.00 0.84 0.39 0.10
Bobbitt, stony surface-----	30	Very limited Slope Depth to hard bedrock Frost action Large stones Low strength	1.00 0.99 0.50 0.42 0.22	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 1.00 0.42 0.10 0.01	Very limited Slope Depth to bedrock Large stones content Droughty Dusty	1.00 0.95 0.79 0.21 0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233: Lacy, very stony surface-----	55	Very limited Depth to hard bedrock Slope Large stones Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Unstable excavation walls Dusty	1.00 1.00 1.00 0.29 0.07	Very limited Slope Depth to bedrock Droughty Large stones content Dusty	1.00 1.00 1.00 0.79 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Large stones Frost action Depth to hard bedrock	1.00 0.82 0.50 0.35	Very limited Depth to hard bedrock Slope Large stones Dusty Unstable excavation walls	1.00 1.00 0.82 0.07 0.01	Very limited Slope Large stones content Depth to bedrock Dusty	1.00 0.88 0.21 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Large stones Frost action	1.00 0.73 0.50	Very limited Slope Depth to hard bedrock Large stones Unstable excavation walls Dusty	1.00 0.77 0.73 0.01 0.01	Very limited Slope Large stones content Dusty	1.00 0.84 0.01
255: Shayhill, stony surface-----	80	Very limited Slope Frost action Large stones	1.00 0.50 0.18	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.18 0.02 0.01	Very limited Slope Dusty	1.00 0.02
256: Shayhill, stony surface-----	80	Very limited Slope Frost action Large stones	1.00 0.50 0.15	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.15 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.57 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Frost action Large stones	1.00 0.50 0.23	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.23 0.03 0.01	Very limited Slope Gravel content Dusty	1.00 0.57 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260: Seddow-----	80	Very limited Slope Low strength Frost action Shrink-swell	1.00 1.00 0.50 0.25	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.93 0.02 0.01	Very limited Slope Dusty	1.00 0.02
261: Sly, dry-----	45	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Shayhill, dry-----	40	Very limited Slope Frost action Large stones	1.00 0.50 0.24	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.24 0.02 0.01	Very limited Slope Dusty	1.00 0.02
262: Seddow-----	45	Very limited Slope Low strength Frost action Shrink-swell	1.00 1.00 0.50 0.25	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.93 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Sly, dry-----	40	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
300: Taney-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 1.00 0.88	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 1.00 1.00 0.04 0.01	Somewhat limited Depth to saturated zone Dusty	0.88 0.04
301: Taney-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 1.00 0.88	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Very limited Depth to thin cemented pan Frost action Low strength Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 0.96 0.54	Very limited Depth to thin cemented pan Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 0.16 0.04 0.01	Somewhat limited Depth to saturated zone Low exchange capacity Slope Dusty	0.96 0.50 0.16 0.04
Benewah-----	40	Very limited Frost action Low strength Depth to saturated zone Slope	1.00 1.00 0.94 0.63	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 0.63 0.04 0.01	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.94 0.63 0.50 0.04
304: Benewah-----	45	Very limited Frost action Low strength Slope Depth to saturated zone	1.00 1.00 1.00 0.94	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 0.03 0.01	Very limited Slope Depth to saturated zone Low exchange capacity Dusty	1.00 0.94 0.50 0.03
Santa-----	35	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone Slope	1.00 1.00 1.00 0.96 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 0.63 0.03	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.03
310: Santa-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone	1.00 1.00 1.00 0.96	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 1.00 0.04 0.01	Somewhat limited Depth to saturated zone Dusty	0.96 0.04
311: Santa-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone Slope	1.00 1.00 1.00 0.96 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
314: Sharptop-----	45	Very limited Frost action Slope	1.00 0.63	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.02 0.01	Somewhat limited Slope Dusty	0.63 0.02
Santa-----	40	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone Slope	1.00 1.00 1.00 0.96 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.96 0.63 0.02
315: Setters-----	80	Very limited Low strength Depth to saturated zone Shrink-swell Frost action	1.00 0.94 0.78 0.50	Very limited Depth to saturated zone Too clayey Dusty Unstable excavation walls	1.00 0.08 0.04 0.02	Somewhat limited Depth to saturated zone Dusty	0.94 0.04
316: Setters-----	50	Very limited Low strength Depth to saturated zone Shrink-swell Frost action	1.00 0.94 0.78 0.50	Very limited Depth to saturated zone Too clayey Dusty Unstable excavation walls	1.00 0.08 0.04 0.02	Somewhat limited Depth to saturated zone Dusty	0.94 0.04
Taney-----	30	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 1.00 0.88	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.04	Somewhat limited Depth to saturated zone Slope Dusty	0.88 0.63 0.04
320: Reggear-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
321: Reggear, moist-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.01	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.01
322: Reggear, moist-----	50	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02
Sly-----	30	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
323: Bechtel-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Reggear-----	35	Very limited Depth to thick cemented pan Slope Depth to thin cemented pan Frost action Low strength	1.00 1.00 1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Slope Depth to saturated zone Dusty	1.00 1.00 1.00 1.00 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.56 0.02
325: Reggear-----	55	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 1.00 0.56	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 1.00 1.00 0.02 0.01	Somewhat limited Depth to saturated zone Dusty	0.56 0.02
Sharptop, basalt substratum-----	30	Very limited Frost action	1.00	Somewhat limited Dusty Unstable excavation walls	0.02 0.01	Somewhat limited Dusty	0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
326: Reggear-----	50	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 0.63 0.02	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.56 0.02
Seddow-----	35	Very limited Slope Low strength Frost action Shrink-swell	1.00 1.00 0.50 0.25	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.93 0.02 0.01	Very limited Slope Dusty	1.00 0.02
330: Carlinton-----	50	Very limited Depth to thin cemented pan Frost action Low strength Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 0.96 0.54	Very limited Depth to thin cemented pan Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 1.00 0.16 0.04 0.01	Somewhat limited Depth to saturated zone Low exchange capacity Slope Dusty	0.96 0.50 0.16 0.04
Carlinton, dry-----	30	Very limited Depth to thin cemented pan Frost action Low strength Depth to saturated zone Depth to saturated zone Slope	1.00 1.00 1.00 0.96 0.96 0.63	Very limited Depth to thin cemented pan Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 0.63 0.04 0.01	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.96 0.63 0.50 0.04
335: Carlinton, dry-----	80	Very limited Depth to thin cemented pan Frost action Low strength Depth to saturated zone Slope	1.00 1.00 1.00 0.96 0.84	Very limited Depth to thin cemented pan Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 1.00 0.84 0.04 0.01	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.96 0.84 0.50 0.04
336: Carlinton, dry-----	55	Very limited Depth to thin cemented pan Frost action Low strength Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 0.96 0.54	Very limited Depth to thin cemented pan Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 1.00 0.04 0.01	Somewhat limited Depth to saturated zone Low exchange capacity Dusty	0.96 0.50 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
336: Taney-----	25	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 1.00 0.88	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 1.00 0.04 0.01	Somewhat limited Depth to saturated zone Dusty	0.88 0.04
340: Arson-----	45	Very limited Slope Low strength Frost action	1.00 0.78 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Large stones Dusty	1.00 1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
341: Sinkler-----	45	Very limited Frost action Slope Low strength	1.00 1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Arson-----	40	Very limited Slope Low strength Frost action	1.00 0.78 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
342: Sinkler, dry-----	45	Very limited Frost action Slope Low strength	1.00 1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Arson, dry-----	40	Very limited Slope Low strength Frost action	1.00 0.78 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
350: Southwick-----	80	Very limited Frost action Low strength Depth to saturated zone	1.00 1.00 0.06	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.19 0.01	Somewhat limited Low exchange capacity Dusty Depth to saturated zone	0.50 0.19 0.06

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
351: Southwick-----	80	Very limited Frost action Low strength Slope Depth to saturated zone	1.00 1.00 0.63 0.06	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 0.63 0.19 0.01	Somewhat limited Slope Low exchange capacity Dusty Depth to saturated zone	0.63 0.50 0.19 0.06
353: Tensed-----	50	Somewhat limited Frost action Depth to saturated zone Shrink-swell	0.50 0.35 0.01	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.04 0.01	Somewhat limited Low exchange capacity Depth to saturated zone Dusty	0.50 0.35 0.04
Pedee-----	35	Somewhat limited Frost action Depth to saturated zone Shrink-swell	0.50 0.48 0.02	Very limited Depth to saturated zone Too clayey Dusty Unstable excavation walls	1.00 0.13 0.04 0.01	Somewhat limited Depth to saturated zone Dusty	0.48 0.04
354: Tensed-----	50	Very limited Slope Frost action Depth to saturated zone Shrink-swell	1.00 0.50 0.35 0.01	Very limited Slope Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 0.04 0.01	Very limited Slope Low exchange capacity Depth to saturated zone Dusty	1.00 0.50 0.35 0.04
Pedee-----	35	Very limited Slope Frost action Depth to saturated zone Shrink-swell	1.00 0.50 0.48 0.02	Very limited Slope Depth to saturated zone Too clayey Dusty Unstable excavation walls	1.00 1.00 0.13 0.04 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.48 0.04
355: Southwick-----	55	Very limited Frost action Low strength Depth to saturated zone Slope	1.00 1.00 0.06 0.04	Very limited Depth to saturated zone Dusty Slope Unstable excavation walls	1.00 0.19 0.04 0.01	Somewhat limited Low exchange capacity Dusty Depth to saturated zone Slope	0.50 0.19 0.06 0.04
Driscoll-----	30	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 0.75 0.50 0.35	Very limited Depth to saturated zone Dusty Too clayey Unstable excavation walls	1.00 0.19 0.13 0.01	Somewhat limited Depth to saturated zone Dusty	0.35 0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
356: Southwick-----	55	Very limited Slope Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 0.06	Very limited Slope Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 0.19 0.01	Very limited Slope Low exchange capacity Dusty Depth to saturated zone	1.00 0.50 0.19 0.06
Driscoll-----	30	Very limited Slope Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.53 0.50 0.35	Very limited Slope Depth to saturated zone Dusty Too clayey Unstable excavation walls	1.00 1.00 0.19 0.13 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.35 0.19
360: Larkin-----	80	Very limited Frost action Low strength Shrink-swell	1.00 1.00 0.25	Somewhat limited Dusty Unstable excavation walls	0.19 0.01	Somewhat limited Dusty	0.19
361: Larkin-----	80	Very limited Frost action Low strength Slope Shrink-swell	1.00 1.00 1.00 0.25	Very limited Slope Dusty Unstable excavation walls	1.00 0.19 0.01	Very limited Slope Dusty	1.00 0.19
363: Larkin-----	55	Very limited Frost action Low strength Shrink-swell	1.00 1.00 0.25	Somewhat limited Dusty Unstable excavation walls	0.19 0.01	Somewhat limited Dusty	0.19
Driscoll-----	30	Very limited Low strength Shrink-swell Frost action Depth to saturated zone Slope	1.00 0.53 0.50 0.35 0.04	Very limited Depth to saturated zone Dusty Too clayey Slope Unstable excavation walls	1.00 0.19 0.13 0.04 0.01	Somewhat limited Depth to saturated zone Dusty Slope	0.35 0.19 0.04
364: Larkin-----	50	Very limited Frost action Low strength Shrink-swell	1.00 1.00 0.25	Somewhat limited Dusty Unstable excavation walls	0.19 0.01	Somewhat limited Dusty	0.19
Southwick-----	35	Very limited Frost action Low strength Depth to saturated zone	1.00 1.00 0.06	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.19 0.01	Somewhat limited Low exchange capacity Dusty Depth to saturated zone	0.50 0.19 0.06

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
367: Larkin-----	55	Very limited Frost action Low strength Slope Shrink-swell	1.00 1.00 1.00 0.25	Very limited Slope Dusty Unstable excavation walls	1.00 0.19 0.01	Very limited Slope Dusty	1.00 0.19
Driscoll-----	30	Very limited Low strength Slope Frost action Frost action Depth to saturated zone Shrink-swell	1.00 1.00 0.50 0.50 0.35 0.33	Very limited Depth to saturated zone Slope Dusty Too clayey Unstable excavation walls	1.00 1.00 0.19 0.13 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.35 0.19
400: Driscoll-----	80	Very limited Low strength Shrink-swell Slope Slope Frost action Depth to saturated zone	1.00 0.75 0.63 0.63 0.50 0.35	Very limited Depth to saturated zone Slope Dusty Too clayey Unstable excavation walls	1.00 0.63 0.19 0.13 0.01	Somewhat limited Slope Depth to saturated zone Dusty	0.63 0.35 0.19
405: Thatuna-----	45	Very limited Frost action Low strength Slope Depth to saturated zone	1.00 1.00 0.96 0.02	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 0.96 0.22 0.01	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02
Naff-----	40	Very limited Frost action Low strength Slope Shrink-swell	1.00 1.00 0.63 0.50	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.22 0.01	Somewhat limited Slope Dusty	0.63 0.22
406: Thatuna-----	50	Very limited Slope Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 0.02	Very limited Slope Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 0.22 0.01	Very limited Slope Dusty Depth to saturated zone	1.00 0.22 0.02
Naff-----	40	Very limited Slope Frost action Low strength Shrink-swell	1.00 1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.22 0.01	Very limited Slope Dusty	1.00 0.22
410: Palouse-----	50	Very limited Frost action Low strength	1.00 1.00	Somewhat limited Dusty Unstable excavation walls	0.19 0.01	Somewhat limited Dusty	0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410: Naff-----	35	Very limited Frost action Low strength Shrink-swell	1.00 1.00 0.50	Somewhat limited Dusty Unstable excavation walls	0.19 0.01	Somewhat limited Dusty	0.19
411: Palouse-----	80	Very limited Frost action Low strength Slope	1.00 1.00 0.63	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.19 0.01	Somewhat limited Slope Dusty	0.63 0.19
414: Naff-----	45	Very limited Frost action Low strength Shrink-swell	1.00 1.00 0.50	Somewhat limited Dusty Unstable excavation walls	0.22 0.01	Somewhat limited Dusty	0.22
Thatuna-----	40	Very limited Frost action Low strength Depth to saturated zone	1.00 1.00 0.02	Very limited Depth to saturated zone Dusty Unstable excavation walls	1.00 0.22 0.01	Somewhat limited Dusty Depth to saturated zone	0.22 0.02
415: Naff-----	50	Very limited Frost action Low strength Shrink-swell Slope	1.00 1.00 0.50 0.16	Somewhat limited Dusty Slope Unstable excavation walls	0.22 0.16 0.01	Somewhat limited Dusty Slope	0.22 0.16
Tilma-----	35	Very limited Low strength Depth to saturated zone Frost action Slope Shrink-swell	1.00 0.56 0.50 0.16 0.01	Very limited Depth to saturated zone Dusty Slope Too clayey Unstable excavation walls	1.00 0.22 0.16 0.02 0.01	Somewhat limited Depth to saturated zone Dusty Slope	0.56 0.22 0.16
416: Naff-----	45	Very limited Frost action Low strength Slope Shrink-swell	1.00 1.00 0.63 0.50	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.22 0.01	Somewhat limited Slope Dusty	0.63 0.22
Thatuna-----	40	Very limited Frost action Low strength Slope Depth to saturated zone	1.00 1.00 0.96 0.02	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 0.96 0.22 0.01	Somewhat limited Slope Dusty Depth to saturated zone	0.96 0.22 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
417: Naff-----	45	Very limited Frost action Low strength Slope Shrink-swell	1.00 1.00 0.63 0.50	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.22 0.01	Somewhat limited Slope Dusty	0.63 0.22
Palouse-----	40	Very limited Frost action Low strength Slope	1.00 1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.22 0.01	Very limited Slope Dusty	1.00 0.22
420: Garfield-----	45	Very limited Shrink-swell Low strength Slope Frost action	1.00 1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls Too clayey	1.00 0.22 0.08 0.02	Very limited Slope Dusty	1.00 0.22
Tilma-----	35	Very limited Low strength Depth to saturated zone Frost action Shrink-swell	1.00 0.56 0.50 0.01	Very limited Depth to saturated zone Dusty Too clayey Unstable excavation walls	1.00 0.22 0.02 0.01	Somewhat limited Depth to saturated zone Dusty	0.56 0.22
421: Naff-----	55	Very limited Frost action Low strength Shrink-swell Slope	1.00 1.00 0.50 0.16	Somewhat limited Dusty Slope Unstable excavation walls	0.22 0.16 0.01	Somewhat limited Dusty Slope	0.22 0.16
Garfield-----	30	Very limited Shrink-swell Low strength Slope Frost action	1.00 1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls Too clayey	1.00 0.22 0.08 0.02	Very limited Slope Dusty	1.00 0.22
500: Hobo-----	50	Very limited Frost action Slope Depth to saturated zone	1.00 1.00 0.75	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 1.00 0.02 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02
Threebear-----	35	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone Slope	1.00 1.00 1.00 0.90 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 0.63 0.02	Somewhat limited Depth to saturated zone Slope Dusty	0.90 0.63 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Hobo, warm-----	45	Very limited Frost action Slope Depth to saturated zone	1.00 1.00 0.75	Very limited Depth to saturated zone Slope Unstable excavation walls Dusty	1.00 1.00 0.01 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.01
Threebear, warm-----	40	Very limited Depth to thick cemented pan Depth to saturated zone Depth to thin cemented pan Frost action Slope	1.00 1.00 1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Unstable excavation walls	1.00 1.00 1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
510: Honeyjones-----	45	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
600: Ardenvoir-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	35	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
601: Ardenvoir-----	55	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
McCrosket-----	25	Very limited Slope Frost action Large stones	1.00 0.50 0.11	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.11 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
605: Benewah-----	45	Very limited Frost action Low strength Depth to saturated zone Slope	1.00 1.00 0.94 0.63	Very limited Depth to saturated zone Slope Dusty Unstable excavation walls	1.00 0.63 0.03 0.01	Somewhat limited Depth to saturated zone Slope Low exchange capacity Dusty	0.94 0.63 0.50 0.03
Rasser-----	35	Somewhat limited Slope Frost action	0.63 0.50	Somewhat limited Slope Dusty Unstable excavation walls	0.63 0.03 0.01	Somewhat limited Slope Dusty	0.63 0.03
606: Benewah-----	45	Very limited Slope Frost action Low strength Depth to saturated zone	1.00 1.00 1.00 0.94	Very limited Slope Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 0.03 0.01	Very limited Slope Depth to saturated zone Low exchange capacity Dusty	1.00 0.94 0.50 0.03
Rasser-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.03 0.01	Very limited Slope Dusty	1.00 0.03
610: Schumacher-----	80	Very limited Low strength Slope Frost action	1.00 0.63 0.50	Somewhat limited Depth to hard bedrock Slope Dusty Unstable excavation walls	0.79 0.63 0.14 0.01	Somewhat limited Slope Dusty	0.63 0.14
611: Schumacher-----	45	Very limited Slope Low strength Frost action	1.00 0.78 0.50	Very limited Slope Depth to hard bedrock Dusty Unstable excavation walls	1.00 0.79 0.15 0.01	Very limited Slope Dusty	1.00 0.15
Tekoa-----	40	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.20	Very limited Depth to hard bedrock Slope Dusty Unstable excavation walls	1.00 1.00 0.15 0.01	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.15 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
612: Libertybutte-----	45	Very limited Depth to hard bedrock Depth to soft bedrock Slope Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Depth to soft bedrock Slope Dusty Unstable excavation walls	1.00 1.00 1.00 0.17 0.01	Very limited Depth to bedrock Slope Droughty Gravel content Dusty	1.00 1.00 0.97 0.68 0.17
Tekoa-----	40	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.20	Very limited Depth to hard bedrock Slope Dusty Unstable excavation walls	1.00 1.00 0.17 0.01	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.17 0.04
613: Ardenvoir, dry-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.08	Very limited Slope Unstable excavation walls Large stones Dusty	1.00 0.14 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Lotuspoint-----	35	Very limited Large stones Slope Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Unstable excavation walls Large stones Slope Dusty	1.00 1.00 1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
614: Ardenvoir, dry-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.08	Very limited Slope Unstable excavation walls Large stones Dusty	1.00 0.14 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Large stones Dusty	1.00 1.00 1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
617: Tekoa-----	80	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.20	Very limited Depth to hard bedrock Slope Dusty Unstable excavation walls	1.00 1.00 0.15 0.01	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.15 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
621: Huckle-----	80	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
625: Huckle-----	45	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
650: Grangemont-----	80	Very limited Frost action Slope Low strength	1.00 1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
651: Kingspeak-----	55	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Shayhill, stony surface-----	30	Very limited Slope Frost action Large stones	1.00 0.50 0.18	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.18 0.02 0.01	Very limited Slope Dusty	1.00 0.02
652: Kingspeak-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
653: Kingspeak, cool-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
655: Tigley, moist-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.08 0.02
656: Kingspeak, dry-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
660: Threebear-----	80	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Depth to saturated zone	1.00 1.00 1.00 0.90	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Unstable excavation walls Dusty	1.00 1.00 1.00 1.00 0.01 0.01	Somewhat limited Depth to saturated zone Dusty	0.90 0.01
662: Threebear, warm-----	80	Very limited Depth to thick cemented pan Depth to saturated zone Depth to thin cemented pan Frost action Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Unstable excavation walls	1.00 1.00 1.00 1.00 0.63 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01
663: Threebear, warm-----	50	Very limited Depth to thick cemented pan Depth to saturated zone Depth to thin cemented pan Frost action	1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Unstable excavation walls Dusty	1.00 1.00 1.00 1.00 0.01 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01
Porrett-----	35	Very limited Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Unstable excavation walls Dusty	1.00 0.80 0.01 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
665: Grangemont, warm----	80	Very limited Frost action Slope Low strength	1.00 1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
670: Honeyjones, warm----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
671: Honeyjones-----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
680: Ardenvoir-----	45	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	40	Very limited Frost action Slope Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
681: Huckle-----	45	Very limited Frost action Slope Large stones	1.00 1.00 0.02	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Gravel content Slope Dusty	1.00 1.00 0.01
700: Ardenvoir-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
700: Huckle-----	35	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
701: Ardenvoir-----	55	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
McCrosket-----	25	Very limited Slope Frost action Large stones	1.00 0.50 0.11	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.11 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
703: Ardenvoir, dry-----	45	Very limited Slope Frost action Large stones	1.00 0.50 0.08	Very limited Slope Unstable excavation walls Large stones Dusty	1.00 0.14 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Ardenvoir-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Frost action Large stones	1.00 0.50 0.08	Very limited Slope Unstable excavation walls Large stones Dusty	1.00 0.14 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Ardenvoir-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
705: Ardenvoir-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
705: Rasser-----	30	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
706: Ardenvoir-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
707: Huckle, dry-----	50	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	35	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
710: McCrosket-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.11	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.11 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
Ardenvoir-----	30	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
711: McCrosket-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.11	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.11 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
Ardenvoir-----	30	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
712: McCrosket-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.11	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.11 0.05 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.05
Tekoa-----	30	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.20	Very limited Depth to hard bedrock Slope Dusty Unstable excavation walls	1.00 1.00 0.12 0.01	Very limited Slope Gravel content Depth to bedrock Dusty Droughty	1.00 1.00 0.21 0.12 0.04
716: Ahhs-----	80	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
720: Huckle-----	80	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
721: Huckle-----	50	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ardenvoir-----	35	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
735: Lotuspoint, stony surface-----	80	Very limited Slope Large stones Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Large stones Dusty	1.00 1.00 1.00 1.00 0.04	Very limited Slope Depth to bedrock Large stones content Droughty Gravel content	1.00 0.80 0.68 0.43 0.16

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
736: Lotuspoint, stony surface-----	65	Very limited Slope Large stones Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Large stones Dusty	1.00 1.00 1.00 1.00 1.00 1.00 0.03	Very limited Slope Depth to bedrock Large stones content Droughty Gravel content	1.00 0.80 0.68 0.43 0.16
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.08 0.02
757: Hugus, warm-----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.08 0.02
Hugus-----	35	Very limited Slope Frost action	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
765: Saint Maries-----	45	Very limited Slope Frost action	1.00 0.50	Very limited Slope Unstable excavation walls Dusty	1.00 0.19 0.01	Very limited Slope Gravel content Large stones content Dusty Droughty	1.00 0.92 0.08 0.01 0.01
Huckle-----	35	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
770: Pinecreek-----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
771: Honeyjones, warm----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
772: Honeyjones, warm----	45	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
773: Honeyjones, dry-----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
774: Pinecreek, moist----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
775: Pinecreek, moist----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
776: Cassyhill-----	80	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Dusty	1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Dusty	1.00 1.00 1.00 1.00 0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
777: Bouldercreek, warm--	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
778: Cassychill-----	50	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Unstable excavation walls Slope Dusty	1.00 1.00 1.00 1.00 0.05	Very limited Gravel content Depth to bedrock Droughty Slope Dusty	1.00 1.00 1.00 1.00 0.05
Lotuspoint-----	35	Very limited Large stones Slope Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Unstable excavation walls Large stones Slope Dusty	1.00 1.00 1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
779: Bouldercreek-----	80	Very limited Slope Frost action Large stones	1.00 1.00 0.06	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.06 0.01 0.01	Very limited Slope Dusty	1.00 0.01
780: Ardenvoir-----	30	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.32 0.01
Huckle-----	30	Very limited Slope Frost action Large stones	1.00 1.00 0.02	Very limited Slope Large stones Dusty Unstable excavation walls	1.00 0.02 0.01 0.01	Very limited Slope Dusty	1.00 0.01
Saint Maries, dry---	30	Very limited Slope Large stones Frost action	1.00 0.81 0.50	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.81 0.61 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
781: Ahhs, moist-----	45	Very limited Slope Frost action Large stones	1.00 0.50 0.04	Very limited Slope Large stones Unstable excavation walls Dusty	1.00 0.04 0.02 0.01	Very limited Slope Large stones content Gravel content Dusty	1.00 1.00 0.03 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
781: Honeyjones, warm----	35	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Frost action Large stones	1.00 0.50 0.08	Very limited Slope Unstable excavation walls Large stones Dusty	1.00 0.14 0.08 0.02	Very limited Slope Gravel content Dusty	1.00 0.68 0.02
Cassyhill-----	35	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Dusty	1.00 1.00 1.00 0.05	Very limited Slope Gravel content Depth to bedrock Droughty Dusty	1.00 1.00 1.00 0.05
784: Pinecreek, moist----	45	Very limited Slope Frost action	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.02
Lotuspoint-----	35	Very limited Slope Large stones Depth to hard bedrock Frost action	1.00 1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Unstable excavation walls Large stones Dusty	1.00 1.00 1.00 1.00 1.00 0.04	Very limited Slope Gravel content Depth to bedrock Droughty Large stones content	1.00 0.99 0.80 0.43 0.08
791: Latour-----	80	Very limited Slope Large stones Frost action	1.00 0.97 0.50	Very limited Slope Large stones Unstable excavation walls	1.00 0.97 0.01	Very limited Slope Large stones content Gravel content	1.00 0.16 0.01
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Urban land-----	35	Not rated		Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Depth to saturated zone Flooding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.80 0.02 0.01	Very limited Flooding Depth to saturated zone Low exchange capacity Dusty	1.00 1.00 0.50 0.02
Aquic Udifluvents---	40	Very limited Flooding Frost action Depth to saturated zone	1.00 0.50 0.12	Very limited Depth to saturated zone Flooding Dusty Unstable excavation walls	1.00 0.60 0.02 0.01	Somewhat limited Low exchange capacity Flooding Depth to saturated zone Dusty	0.75 0.60 0.12 0.02
902: Ahrs-----	80	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
903: Ahrs-----	50	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
Pinecreek-----	30	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 0.92 0.01
907: Honeyjones-----	80	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01
908: Honeyjones-----	45	Very limited Slope Frost action	1.00 1.00	Very limited Slope Unstable excavation walls Dusty	1.00 0.01 0.01	Very limited Slope Dusty	1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
908: Ahrs-----	35	Very limited Slope Frost action Large stones	1.00 0.50 0.01	Very limited Slope Unstable excavation walls Dusty Large stones	1.00 0.01 0.01 0.01	Very limited Slope Gravel content Dusty	1.00 1.00 0.01
913: Hobo-----	85	Very limited Slope Frost action Depth to saturated zone	1.00 1.00 0.75	Very limited Slope Depth to saturated zone Dusty Unstable excavation walls	1.00 1.00 0.02 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 0.75 0.02
Ac1: Arson-----	40	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.04 0.01	Very limited Slope Dusty	1.00 0.04
Carlinton-----	35	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 1.00 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.02
Ac2: Arson, dry-----	45	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.05 0.01	Very limited Slope Dusty	1.00 0.05
Carlinton, dry-----	30	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Low strength Slope	1.00 1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 1.00 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.78 0.03
An4: Arson, dry-----	55	Very limited Slope Low strength Frost action	1.00 1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.03 0.01	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 22.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Minaloosa, dry-----	20	Very limited Slope Frost action	1.00 0.50	Very limited Slope Dusty Unstable excavation walls	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.02
Rs2: Reggear, moist-----	40	Very limited Depth to thick cemented pan Depth to thin cemented pan Frost action Slope Low strength	1.00 1.00 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to thin cemented pan Depth to saturated zone Slope Dusty	1.00 1.00 1.00 1.00 1.00 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 0.39 0.03
Stewah-----	25	Very limited Frost action Slope	1.00 1.00	Very limited Slope Dusty Unstable excavation walls	1.00 0.03 0.01	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Flooding Depth to saturated zone Seepage, bottom layer Filtering capacity	1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited Seepage Too sandy Depth to saturated zone Gravel content Large stones	1.00 0.50 0.47 0.44 0.07
Typic Fluvaquents, protected-----	40	Very limited Flooding Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 1.00 0.50	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Large stones Dusty	1.00 0.50 0.06 0.03
116: Thatuna-----	45	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Seepage Slope	1.00 0.50 0.08	Somewhat limited Depth to saturated zone Dusty	0.62 0.25
Caldwell-----	35	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.25
118: Thatuna-----	50	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Somewhat limited Depth to saturated zone Dusty	0.62 0.22
Cald-----	30	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Dusty	1.00 0.22
120: Latahco-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121: Latahco-----	60	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.07
Lovell-----	30	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.07
122: Tilma-----	45	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 0.50 0.08	Somewhat limited Depth to saturated zone Dusty Too clayey	0.98 0.22 0.01
Latah-----	40	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty Too clayey	0.99 0.22 0.10
124: Caldwell-----	60	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.25
Cald-----	25	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Dusty	1.00 0.25
125: Lovell-----	55	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.02
Porrett-----	20	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
125: Aquandic Endoaquepts	15	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty Gravel content	1.00 0.02 0.01
130: Porrett-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.01
136: Lovell-----	45	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.02
Porrett-----	40	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.02
141: Miesen-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty	0.47 0.04
142: Miesen-----	45	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty	0.47 0.04
Ramsdell-----	40	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
143: Miesen, protected, drained-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty	0.47 0.04
144: Miesen, protected, drained-----	50	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty	0.47 0.04
Ramsdell, protected, drained	35	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
145: Bellslake, protected, drained	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.03
150: Pywell, protected, drained-----	80	Very limited Flooding Depth to saturated zone Subsidence Slow water movement	1.00 1.00 1.00 0.50	Very limited Flooding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Organic matter content Dusty	1.00 1.00 0.03
155: Ramsdell-----	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
156: Ramsdell, protected, drained	80	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
157: Ramsdell, protected, drained	50	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
DeVoignes, protected, drained	30	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
158: DeVoignes-----	45	Very limited Flooding Ponding Depth to saturated zone Slow water movement	1.00 1.00 1.00 0.50	Very limited Ponding Flooding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Dusty	1.00 1.00 0.04
Pywell-----	40	Very limited Flooding Ponding Depth to saturated zone Subsidence Slow water movement	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Flooding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Organic matter content Dusty	1.00 1.00 1.00 0.04
200: Blinn, stony surface	80	Very limited Depth to bedrock Slope Slow water movement Large stones	1.00 1.00 0.50 0.22	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.22 0.02
201: Blinn, stony surface	80	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 1.00 0.50 0.22	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.22 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
202: Blinn, stony surface	55	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 1.00 0.50 0.22	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.22 0.02
Bobbitt, stony surface-----	30	Very limited Slope Depth to bedrock Large stones	1.00 1.00 0.42	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty Too clayey	1.00 1.00 0.42 0.08 0.06
210: Agatha, stony surface-----	80	Very limited Slope Depth to bedrock Slow water movement	1.00 0.98 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.94 0.03
212: Agatha, stony surface-----	80	Very limited Slope Depth to bedrock Slow water movement	1.00 0.98 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.94 0.03
230: Lacy, stony surface	65	Very limited Depth to bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.82 0.10
Rock outcrop-----	15	Not rated		Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Depth to bedrock Slope Large stones	1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.07
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Depth to bedrock Slope Large stones	1.00 1.00 0.82	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.82 0.10

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
232: Bobbitt, stony surface-----	30	Very limited Depth to bedrock Slope Large stones	1.00 1.00 0.42	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.99 0.50	Very limited Depth to bedrock Slope Large stones Dusty Too clayey	1.00 1.00 0.42 0.10 0.06
233: Lacy, very stony surface-----	55	Very limited Depth to bedrock Slope Large stones	1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 1.00 0.82 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.94 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.82 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 0.85 0.73 0.50	Very limited Slope Large stones Depth to hard bedrock Seepage	1.00 1.00 0.77 0.50	Very limited Slope Large stones Depth to bedrock Dusty	1.00 0.88 0.61 0.01
255: Shayhill, stony surface-----	80	Very limited Slope Slow water movement Large stones	1.00 0.50 0.18	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.55 0.02
256: Shayhill, stony surface-----	80	Very limited Slope Slow water movement Large stones	1.00 0.50 0.15	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.52 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Slow water movement Large stones	1.00 0.50 0.23	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.65 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260: Seddow-----	80	Very limited Slope Depth to bedrock Slow water movement	1.00 0.94 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.93 0.50	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 0.84 0.02 0.01
261: Sly, dry-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Shayhill, dry-----	40	Very limited Slope Slow water movement Large stones	1.00 0.50 0.24	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.82 0.02
262: Seddow-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 0.94 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.93 0.50	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 0.84 0.02 0.01
Sly, dry-----	40	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
300: Taney-----	80	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
301: Taney-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
303: Carlinton-----	45	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.50 0.16	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04
Benewah-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
304: Benewah-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Santa-----	35	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03
310: Santa-----	80	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
311: Santa-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
314: Sharptop-----	45	Somewhat limited Depth to bedrock Slope Slow water movement	0.82 0.63 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.71 0.50	Somewhat limited Slope Depth to bedrock Dusty	0.63 0.54 0.02
Santa-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
315: Setters-----	80	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Hard to compact Too clayey Dusty	1.00 1.00 0.71 0.04
316: Setters-----	50	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Hard to compact Too clayey Dusty	1.00 1.00 0.71 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
316: Taney-----	30	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
320: Reggear-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Slope Dusty	0.98 0.63 0.02
321: Reggear, moist-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Slope Dusty	0.98 0.63 0.01
322: Reggear, moist-----	50	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Slope Dusty	0.98 0.63 0.02
Sly-----	30	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
323: Bechtel-----	50	Very limited Slope Slow water movement Depth to bedrock	1.00 0.50 0.45	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.13	Very limited Slope Depth to bedrock Dusty	1.00 0.05 0.02
Reggear-----	35	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.98 0.02
325: Reggear-----	55	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Somewhat limited Depth to saturated zone Dusty	0.98 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325: Sharptop, basalt substratum-----	30	Somewhat limited Depth to bedrock Slow water movement	0.89 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.84 0.50	Somewhat limited Depth to bedrock Dusty	0.71 0.02
326: Reggear-----	50	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Slope Dusty	0.98 0.63 0.02
Seddow-----	35	Very limited Slope Depth to bedrock Slow water movement	1.00 0.94 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.93 0.50	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 0.84 0.02 0.01
330: Carlinton-----	50	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.50 0.16	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
335: Carlinton, dry-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.84 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.84 0.04
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04
Taney-----	25	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited Depth to saturated zone Dusty	1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
340: Arson-----	45	Very limited Slope Slow water movement Depth to bedrock	1.00 0.50 0.38	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.08	Very limited Slope Depth to bedrock Dusty	1.00 0.02 0.02
Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 1.00 0.05
341: Sinkler-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Arson-----	40	Very limited Slope Slow water movement Depth to bedrock	1.00 0.50 0.38	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.08	Very limited Slope Dusty Depth to bedrock	1.00 0.02 0.02
342: Sinkler, dry-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Arson, dry-----	40	Very limited Slope Slow water movement Depth to bedrock	1.00 0.50 0.38	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.08	Very limited Slope Dusty Depth to bedrock	1.00 0.02 0.02
350: Southwick-----	80	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Somewhat limited Depth to saturated zone Dusty	0.73 0.19
351: Southwick-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Slope Dusty	0.73 0.63 0.19
353: Tensed-----	50	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Somewhat limited Depth to saturated zone Gravel content Dusty Too clayey	0.93 0.26 0.04 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
353: Pedee-----	35	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Gravel content Dusty Too clayey	0.96 0.94 0.04 0.01
354: Tensed-----	50	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Gravel content Dusty Too clayey	1.00 0.93 0.26 0.04 0.01
Pedee-----	35	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Gravel content Dusty Too clayey	1.00 0.96 0.94 0.04 0.01
355: Southwick-----	55	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.50 0.04	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty Slope	0.73 0.19 0.04
Driscoll-----	30	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Hard to compact Depth to saturated zone Too clayey Dusty	1.00 0.93 0.27 0.19
356: Southwick-----	55	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.73 0.19
Driscoll-----	30	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Hard to compact Depth to saturated zone Too clayey Dusty	1.00 1.00 0.93 0.27 0.19
360: Larkin-----	80	Somewhat limited Slow water movement	0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Dusty	0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
361: Larkin-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.19
363: Larkin-----	55	Somewhat limited Slow water movement	0.50	Somewhat limited Slope Seepage	0.92 0.50	Somewhat limited Dusty	0.19
Driscoll-----	30	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00 0.04	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50	Very limited Hard to compact Depth to saturated zone Too clayey Dusty Slope	1.00 0.93 0.27 0.19 0.04
364: Larkin-----	50	Somewhat limited Slow water movement	0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Dusty	0.19
Southwick-----	35	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.92 0.50	Somewhat limited Depth to saturated zone Dusty	0.73 0.19
367: Larkin-----	55	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.19
Driscoll-----	30	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Hard to compact Slope Depth to saturated zone Too clayey Dusty	1.00 1.00 0.93 0.27 0.19
400: Driscoll-----	80	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.63	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Hard to compact Depth to saturated zone Slope Too clayey Dusty	1.00 0.93 0.63 0.27 0.19
405: Thatuna-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.96 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Slope Depth to saturated zone Dusty	0.96 0.62 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
405: Naff-----	40	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Slope Dusty Too clayey	0.63 0.22 0.01
406: Thatuna-----	50	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.62 0.22
Naff-----	40	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Too clayey	1.00 0.22 0.01
410: Palouse-----	50	Somewhat limited Slow water movement	0.50	Somewhat limited Seepage Slope	0.50 0.32	Somewhat limited Dusty	0.19
Naff-----	35	Somewhat limited Slow water movement	0.50	Somewhat limited Slope Seepage	0.68 0.50	Somewhat limited Dusty Too clayey	0.19 0.01
411: Palouse-----	80	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Slope Dusty	0.63 0.19
414: Naff-----	45	Somewhat limited Slow water movement	0.50	Somewhat limited Slope Seepage	0.68 0.50	Somewhat limited Dusty Too clayey	0.22 0.01
Thatuna-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Somewhat limited Depth to saturated zone Dusty	0.62 0.22
415: Naff-----	50	Somewhat limited Slow water movement Slope	0.50 0.16	Very limited Slope Seepage	1.00 0.50	Somewhat limited Dusty Slope Too clayey	0.22 0.16 0.01
Tilma-----	35	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.16	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Somewhat limited Depth to saturated zone Dusty Slope Too clayey	0.98 0.22 0.16 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
416: Naff-----	45	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Slope Dusty Too clayey	0.63 0.22 0.01
Thatuna-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.96 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Somewhat limited Slope Depth to saturated zone Dusty	0.96 0.62 0.22
417: Naff-----	45	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Slope Dusty Too clayey	0.63 0.22 0.01
Palouse-----	40	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.22
420: Garfield-----	45	Very limited Slow water movement Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.50	Very limited Slope Too clayey Dusty	1.00 0.60 0.22
Tilma-----	35	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 0.92 0.50	Somewhat limited Depth to saturated zone Dusty Too clayey	0.98 0.22 0.01
421: Naff-----	55	Somewhat limited Slow water movement Slope	0.50 0.16	Very limited Slope Seepage	1.00 0.50	Somewhat limited Dusty Slope Too clayey	0.22 0.16 0.01
Garfield-----	30	Very limited Slow water movement Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.50	Very limited Slope Too clayey Dusty	1.00 0.60 0.22
500: Hobo-----	50	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.02
Threebear-----	35	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Hobo, warm-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.99 0.01
Threebear, warm-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
510: Honeyjones-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
Ahrs-----	35	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
600: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
601: Ardenvoir-----	55	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
McCrosket-----	25	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.99 0.50 0.11	Very limited Slope Depth to soft bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.96 0.18 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
605: Benewah-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03
Rasser-----	35	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50	Somewhat limited Slope Dusty Too clayey	0.63 0.03 0.02
606: Benewah-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.03
Rasser-----	40	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Too clayey	1.00 0.03 0.02
610: Schumacher-----	80	Somewhat limited Depth to bedrock Slope Slow water movement	0.89 0.63 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.79 0.50	Somewhat limited Depth to bedrock Slope Dusty	0.71 0.63 0.14
611: Schumacher-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 0.89 0.50	Very limited Slope Depth to hard bedrock Seepage	1.00 0.79 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.15
Tekoa-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Seepage Large stones	1.00 1.00 0.50 0.08	Very limited Slope Depth to bedrock Gravel content Dusty Too clayey	1.00 1.00 0.58 0.15 0.01
612: Libertybutte-----	45	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Depth to soft bedrock Slope Seepage	1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Gravel content Dusty	1.00 1.00 0.73 0.17

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
612: Tekoa-----	40	Very limited Depth to bedrock Slope Slow water movement	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Seepage Large stones	1.00 1.00 1.00 0.50 0.08	Very limited Depth to bedrock Slope Gravel content Dusty Too clayey	1.00 1.00 0.58 0.17 0.01
613: Ardenvoir, dry-----	50	Very limited Slope Slow water movement Depth to bedrock Large stones	1.00 0.50 0.25 0.08	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Large stones Dusty	1.00 1.00 0.02
Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 1.00 0.05
614: Ardenvoir, dry-----	50	Very limited Slope Slow water movement Depth to bedrock Large stones	1.00 0.50 0.25 0.08	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Large stones Dusty	1.00 1.00 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.05
617: Tekoa-----	80	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Seepage Large stones	1.00 1.00 0.50 0.08	Very limited Slope Depth to bedrock Gravel content Dusty Too clayey	1.00 1.00 0.58 0.15 0.01
621: Huckle-----	80	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
625: Huckle-----	45	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
625: Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
650: Grangemont-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.01
651: Kingspeak-----	55	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Shayhill, stony surface-----	30	Very limited Slope Slow water movement Large stones	1.00 0.50 0.18	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.55 0.02
652: Kingspeak-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
653: Kingspeak, cool----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
655: Tigley, moist-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
656: Kingspeak, dry-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
660: Threebear-----	80	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 0.92 0.50	Very limited Depth to saturated zone Dusty	1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
662: Threebear, warm-----	80	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01
663: Threebear, warm-----	50	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Seepage Slope	1.00 0.50 0.32	Very limited Depth to saturated zone Dusty	1.00 0.01
Porrett-----	35	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty	1.00 0.01
665: Grangemont, warm----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.01
670: Honeyjones, warm----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
671: Honeyjones-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
680: Ardenvoir-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
Huckle-----	40	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
681: Huckle-----	45	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
681: Ahrs-----	35	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
700: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
701: Ardenvoir-----	55	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
McCrosket-----	25	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.99 0.50 0.11	Very limited Slope Depth to soft bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.96 0.18 0.01
703: Ardenvoir, dry-----	45	Very limited Slope Slow water movement Depth to bedrock Large stones	1.00 0.50 0.25 0.08	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Large stones Dusty	1.00 1.00 0.02
Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Slow water movement Depth to bedrock Large stones	1.00 0.50 0.25 0.08	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Large stones Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
704: Ardenvoir-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
705: Ardenvoir-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.02
Rasser-----	30	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Too clayey	1.00 0.02 0.02
706: Ardenvoir-----	80	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
707: Huckle, dry-----	50	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
Ardenvoir-----	35	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
710: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.99 0.50 0.11	Very limited Slope Depth to soft bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.96 0.18 0.01
Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
711: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.99 0.50 0.11	Very limited Slope Depth to soft bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.96 0.18 0.01
Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
712: McCrosket-----	50	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.99 0.50 0.11	Very limited Slope Depth to soft bedrock Seepage	1.00 0.99 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.96 0.18 0.05
Tekoa-----	30	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Seepage Large stones	1.00 1.00 0.50 0.08	Very limited Slope Depth to bedrock Gravel content Dusty Too clayey	1.00 1.00 0.58 0.12 0.01
716: Ahms-----	80	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
720: Huckle-----	80	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
721: Huckle-----	50	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
Ardenvoir-----	35	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735: Lotuspoint, stony surface-----	80	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.04
736: Lotuspoint, stony surface-----	65	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.03
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
757: Hugus, warm-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Hugus-----	35	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
765: Saint Maries-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.26 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
770: Pinecreek-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Large stones	1.00 0.02 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
771: Honeyjones, warm----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
772: Honeyjones, warm----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
Ahrs-----	35	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
773: Honeyjones, dry-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
774: Pinecreek, moist----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Large stones	1.00 0.02 0.02
775: Pinecreek, moist----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Large stones	1.00 0.02 0.02
776: Cassyhill-----	80	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.50	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.05
777: Boulder creek, warm--	80	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.50	Very limited Slope Seepage	1.00 1.00	Very limited Slope Seepage Too sandy Dusty	1.00 1.00 0.50 0.01
778: Cassyhill-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.50	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
778: Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 1.00 0.50	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 1.00 0.05
779: Bouldercreek-----	80	Very limited Slope Seepage, bottom layer Slow water movement Large stones	1.00 1.00 0.50 0.06	Very limited Slope Seepage	1.00 1.00	Very limited Slope Seepage Dusty	1.00 0.50 0.01
780: Ardenvoir-----	30	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.77 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.61 0.03 0.01
Huckle-----	30	Very limited Slope Depth to bedrock Slow water movement Large stones	1.00 0.89 0.50 0.02	Very limited Slope Depth to soft bedrock Seepage	1.00 0.90 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 0.71 0.24 0.01
Saint Maries, dry---	30	Very limited Slope Large stones Slow water movement	1.00 0.81 0.50	Very limited Slope Seepage Large stones	1.00 0.50 0.29	Very limited Slope Large stones Dusty	1.00 0.98 0.01
781: Ahrs, moist-----	45	Very limited Slope Slow water movement Large stones	1.00 0.50 0.04	Very limited Slope Large stones Seepage	1.00 0.90 0.50	Very limited Slope Large stones Dusty	1.00 0.21 0.01
Honeyjones, warm----	35	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Slow water movement Depth to bedrock Large stones	1.00 0.50 0.25 0.08	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Large stones Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
782: Cassyhill-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.50	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.05
784: Pinecreek, moist----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty Large stones	1.00 0.02 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock Large stones Slow water movement	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Large stones Seepage	1.00 1.00 1.00 0.50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.04
791: Latour-----	80	Very limited Slope Large stones Slow water movement	1.00 0.97 0.50	Very limited Slope Large stones Seepage	1.00 0.92 0.50	Very limited Slope Large stones	1.00 1.00
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Dusty Gravel content	1.00 0.02 0.01
Aquic Udifluvents---	40	Very limited Flooding Depth to saturated zone Seepage, bottom layer Filtering capacity	1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Too sandy Gravel content Large stones	1.00 0.80 0.50 0.44 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
902: Ahrs-----	80	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
903: Ahrs-----	50	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
Pinecreek-----	30	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.02 0.01
907: Honeyjones-----	80	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
908: Honeyjones-----	45	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.47 0.01
Ahrs-----	35	Very limited Slope Slow water movement Large stones	1.00 0.50 0.01	Very limited Slope Seepage	1.00 0.50	Very limited Slope Large stones Dusty	1.00 0.61 0.01
913: Hobo-----	85	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.02
Ac1: Arson-----	40	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.71 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.04
Carlinton-----	35	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 23.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ac2: Arson, dry-----	45	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.71 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.05
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
An4: Arson, dry-----	55	Very limited Slope Depth to bedrock Slow water movement	1.00 0.85 0.50	Very limited Slope Depth to soft bedrock Seepage	1.00 0.71 0.50	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.03
Minaloosa, dry-----	20	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50	Very limited Slope Dusty	1.00 0.02
Rs2: Reggear, moist-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited Slope Depth to saturated zone Dusty	1.00 0.94 0.03
Stewah-----	25	Very limited Slope Slow water movement Depth to bedrock	1.00 0.50 0.28	Very limited Slope Seepage Depth to soft bedrock	1.00 0.50 0.01	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Flooding Seepage, bottom layer Depth to saturated zone Too sandy Large stones	 1.00 1.00 1.00 0.50 0.07	Very limited Flooding Seepage Depth to saturated zone Dusty	 1.00 1.00 1.00 0.03
Typic Fluvaquents, protected-----	40	Very limited Flooding Depth to saturated zone Seepage, bottom layer Large stones Dusty	 1.00 1.00 1.00 0.06 0.03	Very limited Flooding Depth to saturated zone Seepage Dusty	 1.00 1.00 1.00 0.03
116: Thatuna-----	45	Very limited Depth to saturated zone Dusty	 1.00 0.25	Very limited Depth to saturated zone Dusty	 1.00 0.25
Caldwell-----	35	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.25	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.25
118: Thatuna-----	50	Very limited Depth to saturated zone Dusty	 1.00 0.22	Very limited Depth to saturated zone Dusty	 1.00 0.22
Cald-----	30	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.22	Very limited Flooding Depth to saturated zone Seepage Dusty	 1.00 1.00 1.00 0.22
120: Latahco-----	80	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.07	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
121: Latahco-----	60	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.07	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.07
Lovell-----	30	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.07	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.07
122: Tilma-----	45	Very limited Depth to saturated zone Dusty Too clayey	1.00 1.00 0.22 0.01	Very limited Depth to saturated zone Dusty	1.00 1.00 0.22
Latah-----	40	Very limited Flooding Depth to saturated zone Dusty Too clayey	1.00 1.00 0.22 0.10	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.22
124: Caldwell-----	60	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.14	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.14
Cald-----	25	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.14	Very limited Flooding Depth to saturated zone Seepage Dusty	1.00 1.00 1.00 0.14
125: Lovell-----	55	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02
Porrett-----	20	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02
Aquandic Endoaquepts	15	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
130: Porrett-----	80	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.01	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.01
136: Lovell-----	45	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02
Porrett-----	40	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.02
141: Miesen-----	80	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04
142: Miesen-----	45	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04
Ramsdell-----	40	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04
143: Miesen, protected, drained-----	80	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04
144: Miesen, protected, drained-----	50	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
144: Ramsdell, protected, drained	35	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04	
145: Bellslake, protected, drained	80	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.03		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.03	
150: Pywell, protected, drained-----	80	Very limited Flooding 1.00 Organic matter content 1.00 Depth to saturated zone 1.00 Dusty 0.03		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.03	
155: Ramsdell-----	80	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04	
156: Ramsdell, protected, drained	80	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04	
157: Ramsdell, protected, drained	50	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04	
DeVoignes, protected, drained	30	Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04		Very limited Flooding 1.00 Depth to saturated zone 1.00 Dusty 0.04	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
158: DeVoignes-----	45	Very limited Ponding Flooding Depth to saturated zone Dusty	 1.00 1.00 1.00 0.04	Very limited Flooding Ponding Depth to saturated zone Dusty	 1.00 1.00 1.00 0.04
Pywell-----	40	Very limited Ponding Flooding Organic matter content Depth to saturated zone Dusty	 1.00 1.00 1.00 1.00 0.04	Very limited Flooding Ponding Depth to saturated zone Dusty	 1.00 1.00 1.00 0.04
200: Blinn, stony surface	80	Very limited Depth to bedrock Slope Large stones Dusty	 1.00 1.00 0.22 0.02	Very limited Depth to bedrock Slope Dusty	 1.00 1.00 0.02
201: Blinn, stony surface	80	Very limited Slope Depth to bedrock Large stones Dusty	 1.00 1.00 0.22 0.02	Very limited Slope Depth to bedrock Dusty	 1.00 1.00 0.02
202: Blinn, stony surface	55	Very limited Slope Depth to bedrock Large stones Dusty	 1.00 1.00 0.22 0.02	Very limited Slope Depth to bedrock Dusty	 1.00 1.00 0.02
Bobbitt, stony surface-----	30	Very limited Slope Depth to bedrock Large stones Dusty Too clayey	 1.00 1.00 0.42 0.08 0.06	Very limited Slope Depth to bedrock Dusty	 1.00 1.00 0.08
210: Agatha, stony surface-----	80	Very limited Depth to bedrock Slope Dusty	 1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	 1.00 0.94 0.03
212: Agatha, stony surface-----	80	Very limited Slope Depth to bedrock Dusty	 1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	 1.00 0.94 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
230: Lacy, stony surface	65	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.82 0.10	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.07	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.07
Rock outcrop-----	25	Not rated		Not rated	
232: Lacy, stony surface	55	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.82 0.10	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.10
Bobbitt, stony surface-----	30	Very limited Depth to bedrock Slope Large stones Dusty Too clayey	1.00 1.00 0.42 0.10 0.06	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.10
233: Lacy, very stony surface-----	55	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.07	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.82 0.07	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.88 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
255: Shayhill, stony surface-----	80	Very limited Slope Large stones Dusty	1.00 0.55 0.02	Very limited Slope Dusty	1.00 0.02
256: Shayhill, stony surface-----	80	Very limited Slope Large stones Dusty	1.00 0.52 0.01	Very limited Slope Dusty	1.00 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Large stones Dusty	1.00 0.65 0.03	Very limited Slope Dusty	1.00 0.03
260: Seddow-----	80	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 1.00 0.02 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.84 0.02
261: Sly, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Shayhill, dry-----	40	Very limited Slope Large stones Dusty	1.00 0.82 0.02	Very limited Slope Dusty	1.00 0.02
262: Seddow-----	45	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 1.00 0.02 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.84 0.02
Sly, dry-----	40	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
300: Taney-----	80	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04
301: Taney-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Carlinton-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04
Benewah-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
304: Benewah-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Santa-----	35	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03
310: Santa-----	85	Very limited Depth to saturated zone Dusty	1.00 0.03	Very limited Depth to saturated zone Dusty	1.00 0.03
311: Santa-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.03
314: Sharptop-----	45	Very limited Depth to bedrock Slope Dusty	1.00 0.63 0.02	Somewhat limited Slope Depth to bedrock Dusty	0.63 0.54 0.02
Santa-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
315: Setters-----	80	Very limited Depth to saturated zone Too clayey Dusty	1.00 0.71 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Setters-----	50	Very limited Depth to saturated zone Too clayey Dusty	1.00 0.71 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04
Taney-----	30	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
320: Reggear-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
321: Reggear, moist-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01
322: Reggear, moist-----	50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
Sly-----	30	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
323: Bechtel-----	50	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.02	Very limited Slope Depth to bedrock Dusty	1.00 0.05 0.02
Reggear-----	35	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.02
325: Reggear-----	55	Very limited Depth to saturated zone Dusty	1.00 0.02	Very limited Depth to saturated zone Dusty	1.00 0.02
Sharptop, basalt substratum-----	30	Very limited Depth to bedrock Dusty	1.00 0.02	Somewhat limited Depth to bedrock Dusty	0.71 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
326: Reggear-----	50	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
Seddow-----	35	Very limited Depth to bedrock Slope Dusty Too clayey	1.00 1.00 0.02 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.84 0.02
330: Carlinton-----	50	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.16 0.04
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.04
335: Carlinton, dry-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.84 0.04	Very limited Depth to saturated zone Slope Dusty	1.00 0.84 0.04
336: Carlinton, dry-----	55	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04
Taney-----	25	Very limited Depth to saturated zone Dusty	1.00 0.04	Very limited Depth to saturated zone Dusty	1.00 0.04
340: Arson-----	45	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.04	Very limited Slope Dusty Depth to bedrock	1.00 0.04 0.02
Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.14 0.04	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.04
341: Sinkler-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
341: Arson-----	40	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty Depth to bedrock	1.00 0.02 0.02
342: Sinkler, dry-----	45	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Arson, dry-----	40	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.02	Very limited Slope Dusty Depth to bedrock	1.00 0.02 0.02
350: Southwick-----	80	Very limited Depth to saturated zone Dusty	1.00 0.19	Very limited Depth to saturated zone Dusty	1.00 0.19
351: Southwick-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.19	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.19
353: Tensed-----	50	Very limited Depth to saturated zone Dusty Too clayey	1.00 0.04 0.01	Very limited Depth to saturated zone Dusty	1.00 0.04
Pedee-----	35	Very limited Depth to saturated zone Dusty Too clayey	1.00 0.04 0.01	Very limited Depth to saturated zone Dusty	1.00 0.04
354: Tensed-----	50	Very limited Slope Depth to saturated zone Dusty Too clayey	1.00 1.00 0.04 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.04
Pedee-----	35	Very limited Slope Depth to saturated zone Dusty Too clayey	1.00 1.00 0.04 0.01	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
355: Southwick-----	55	Very limited Depth to saturated zone Dusty Slope	1.00 0.19 0.04	Very limited Depth to saturated zone Dusty Slope	1.00 0.19 0.04
Driscoll-----	30	Very limited Depth to saturated zone Too clayey Dusty	1.00 0.27 0.19	Very limited Depth to saturated zone Dusty	1.00 0.19
356: Southwick-----	55	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.19	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.19
Driscoll-----	30	Very limited Slope Depth to saturated zone Too clayey Dusty	1.00 1.00 0.27 0.19	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.19
360: Larkin-----	80	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
361: Larkin-----	80	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19
363: Larkin-----	55	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Driscoll-----	30	Very limited Depth to saturated zone Too clayey Dusty Slope	1.00 0.27 0.19 0.04	Very limited Depth to saturated zone Dusty Slope	1.00 0.19 0.04
364: Larkin-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Southwick-----	35	Very limited Depth to saturated zone Dusty	1.00 0.19	Very limited Depth to saturated zone Dusty	1.00 0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
367: Larkin-----	55	Very limited Slope Dusty	1.00 0.19	Very limited Slope Dusty	1.00 0.19
Driscoll-----	30	Very limited Depth to saturated zone Slope Too clayey Dusty	1.00 1.00 0.27 0.19	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.19
400: Driscoll-----	80	Very limited Depth to saturated zone Slope Too clayey Dusty	1.00 0.63 0.27 0.19	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.19
405: Thatuna-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 0.96 0.22	Very limited Depth to saturated zone Slope Dusty	1.00 0.96 0.22
Naff-----	40	Somewhat limited Slope Dusty Too clayey	0.63 0.22 0.01	Somewhat limited Slope Dusty	0.63 0.22
406: Thatuna-----	50	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.22	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.22
Naff-----	40	Very limited Slope Dusty Too clayey	1.00 0.22 0.01	Very limited Slope Dusty	1.00 0.22
410: Palouse-----	50	Somewhat limited Dusty	0.19	Somewhat limited Dusty	0.19
Naff-----	35	Somewhat limited Dusty Too clayey	0.19 0.01	Somewhat limited Dusty	0.19
411: Palouse-----	80	Somewhat limited Slope Dusty	0.63 0.19	Somewhat limited Slope Dusty	0.63 0.19
414: Naff-----	45	Somewhat limited Dusty Too clayey	0.22 0.01	Somewhat limited Dusty	0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
414: Thatuna-----	40	Very limited Depth to saturated zone Dusty	1.00 0.22	Very limited Depth to saturated zone Dusty	1.00 0.22
415: Naff-----	50	Somewhat limited Dusty Slope Too clayey	 0.22 0.16 0.01	Somewhat limited Dusty Slope	 0.22 0.16
Tilma-----	35	Very limited Depth to saturated zone Dusty Slope Too clayey	1.00 0.22 0.16 0.01	Very limited Depth to saturated zone Dusty Slope	1.00 0.22 0.16
416: Naff-----	45	Somewhat limited Slope Dusty Too clayey	 0.63 0.22 0.01	Somewhat limited Slope Dusty	 0.63 0.22
Thatuna-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 0.96 0.22	Very limited Depth to saturated zone Slope Dusty	1.00 0.96 0.22
417: Naff-----	45	Somewhat limited Slope Dusty Too clayey	 0.63 0.22 0.01	Somewhat limited Slope Dusty	 0.63 0.22
Palouse-----	40	Very limited Slope Dusty	 1.00 0.22	Very limited Slope Dusty	 1.00 0.22
420: Garfield-----	50	Very limited Slope Too clayey Dusty	 1.00 0.60 0.22	Very limited Slope Dusty	 1.00 0.22
Tilma-----	35	Very limited Depth to saturated zone Dusty Too clayey	1.00 0.22 0.01	Very limited Depth to saturated zone Dusty	1.00 0.22
421: Naff-----	55	Somewhat limited Dusty Slope Too clayey	 0.22 0.16 0.01	Somewhat limited Dusty Slope	 0.22 0.16

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
421: Garfield-----	35	Very limited Slope Too clayey Dusty	1.00 0.60 0.22	Very limited Slope Dusty	1.00 0.22
500: Hobo-----	50	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02
Threebear-----	35	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.02
501: Hobo, warm-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
Threebear, warm-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.01
510: Honeyjones-----	45	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Large stones Dusty	1.00 0.61 0.01	Very limited Slope Dusty	1.00 0.01
600: Ardenvoir-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
601: Ardenvoir-----	55	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
McCrosket-----	25	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.18 0.02	Very limited Slope Depth to bedrock Dusty	1.00 0.96 0.02
605: Benewah-----	45	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.03
Rasser-----	35	Somewhat limited Slope Dusty Too clayey	0.63 0.03 0.02	Somewhat limited Slope Dusty	0.63 0.03
606: Benewah-----	45	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.03	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.03
Rasser-----	40	Very limited Slope Dusty Too clayey	1.00 0.03 0.02	Very limited Slope Dusty	1.00 0.03
610: Schumacher-----	80	Very limited Depth to bedrock Slope Dusty	1.00 0.63 0.14	Somewhat limited Depth to bedrock Slope Dusty	0.71 0.63 0.14
611: Schumacher-----	45	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.15	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.15
Tekoa-----	40	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 1.00 0.15 0.01	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.15

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612: Libertybutte-----	45	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.17	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.17
Tekoa-----	40	Very limited Depth to bedrock Slope Dusty Too clayey	1.00 1.00 0.17 0.01	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.17
613: Ardenvoir, dry-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.41 0.03	Very limited Slope Dusty	1.00 0.03
Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.14 0.05	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.05
614: Ardenvoir, dry-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.41 0.02	Very limited Slope Dusty	1.00 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.14 0.03	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.03
617: Tekoa-----	80	Very limited Slope Depth to bedrock Dusty Too clayey	1.00 1.00 0.15 0.01	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.15
621: Huckle-----	80	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
625: Huckle-----	45	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
625: Ardenvoir-----	40	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
650: Grangemont-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
651: Kingspeak-----	55	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Shayhill, stony surface-----	30	Very limited Slope Large stones Dusty	1.00 0.55 0.02	Very limited Slope Dusty	1.00 0.02
652: Kingspeak-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
653: Kingspeak, cool-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
655: Tigley, moist-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
656: Kingspeak, dry-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
660: Threebear-----	80	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01
662: Threebear, warm-----	80	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Dusty	1.00 0.63 0.01
663: Threebear, warm-----	50	Very limited Depth to saturated zone Dusty	1.00 0.01	Very limited Depth to saturated zone Dusty	1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
663: Porrett-----	35	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.01	Very limited Flooding Depth to saturated zone Dusty	1.00 1.00 0.01
665: Grangemont, warm----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
670: Honeyjones, warm----	80	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
671: Honeyjones-----	80	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
680: Ardenvoir-----	45	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
Huckle-----	40	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
681: Huckle-----	45	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
Ahrs-----	35	Very limited Slope Large stones Dusty	1.00 0.08 0.01	Very limited Slope Dusty	1.00 0.01
700: Ardenvoir-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
701: Ardenvoir-----	55	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
McCrosket-----	25	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.18 0.02	Very limited Slope Depth to bedrock Dusty	1.00 0.96 0.02
703: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
Ardenvoir-----	40	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
Ardenvoir-----	40	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
705: Ardenvoir-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.02	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.02
Rasser-----	30	Very limited Slope Dusty Too clayey	1.00 0.02 0.02	Very limited Slope Dusty	1.00 0.02
706: Ardenvoir-----	80	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
707: Huckle, dry-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
Ardenvoir-----	35	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
710: McCrosket-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.18 0.02	Very limited Slope Depth to bedrock Dusty	1.00 0.96 0.02
Ardenvoir-----	30	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
711: McCrosket-----	55	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.46 0.01
Ardenvoir-----	35	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
712: McCrosket-----	59	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	1.00 0.46 0.03
Tekoa-----	35	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.04	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.04
716: Ahhs-----	80	Very limited Slope Large stones Dusty	1.00 0.61 0.01	Very limited Slope Dusty	1.00 0.01
720: Huckle-----	80	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
721: Huckle-----	50	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
Ardenvoir-----	35	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
735: Lotuspoint, stony surface-----	80	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.04	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.04
736: Lotuspoint, stony surface-----	65	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.03
Rock outcrop-----	15	Not rated		Not rated	
756: Tigley-----	80	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
757: Hugus, warm-----	80	Very limited Slope Dusty	1.00 0.01	Very limited Slope Dusty	1.00 0.01
758: Tigley, moist-----	50	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Hugus-----	35	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
765: Saint Maries-----	45	Very limited Slope Large stones Dusty	1.00 0.26 0.01	Very limited Slope Dusty	1.00 0.01
Huckle-----	35	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
770: Pinecreek-----	80	Very limited Slope Large stones Dusty	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.01
771: Honeyjones, warm----	80	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
772: Honeyjones, warm----	45	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Large stones Dusty	1.00 0.61 0.01	Very limited Slope Dusty	1.00 0.01
773: Honeyjones, dry-----	80	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
774: Pinecreek, moist----	80	Very limited Slope Dusty Large stones	1.00 0.02 0.02	Very limited Slope Dusty	1.00 0.02
775: Pinecreek, moist----	80	Very limited Slope Dusty Large stones	1.00 0.03 0.02	Very limited Slope Dusty	1.00 0.03
776: Cassychill-----	80	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.04	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.04
777: Boulder creek, warm--	80	Very limited Slope Seepage, bottom layer Too sandy Dusty	1.00 1.00 0.50 0.01	Very limited Slope Seepage Dusty	1.00 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
778: Cassychill-----	50	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.05	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.05
Lotuspoint-----	35	Very limited Depth to bedrock Slope Large stones Dusty	1.00 1.00 0.14 0.06	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.06
779: Bouldercreek-----	75	Very limited Slope Seepage, bottom layer	1.00 1.00	Very limited Slope Seepage	1.00 1.00
780: Ardenvoir-----	30	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.03 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.01
Huckle-----	30	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 0.24 0.01	Very limited Slope Depth to bedrock Dusty	1.00 0.71 0.01
Saint Maries, dry---	30	Very limited Slope Large stones Dusty	1.00 0.98 0.01	Very limited Slope Dusty	1.00 0.01
781: Ahhs, moist-----	45	Very limited Slope Large stones Dusty	1.00 0.21 0.01	Very limited Slope Dusty	1.00 0.01
Honeyjones, warm----	35	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Depth to bedrock Large stones Dusty	1.00 1.00 1.00 0.02	Very limited Slope Dusty	1.00 0.02
Cassychill-----	35	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
784: Pinecreek, moist----	45	Very limited Slope Dusty Large stones	 1.00 0.02 0.02	Very limited Slope Dusty	 1.00 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock Large stones Dusty	 1.00 1.00 1.00 0.04	Very limited Slope Depth to bedrock Dusty	 1.00 1.00 0.04
791: Latour-----	80	Very limited Slope Large stones	 1.00 1.00	Very limited Slope	 1.00
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope Dusty	 1.00 0.02	Very limited Slope Dusty	 1.00 0.02
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.02	Very limited Flooding Depth to saturated zone Dusty	 1.00 1.00 0.02
Aquic Udifluvents---	40	Very limited Flooding Seepage, bottom layer Depth to saturated zone Too sandy Large stones	 1.00 1.00 1.00 0.50 0.07	Very limited Flooding Seepage Depth to saturated zone Dusty	 1.00 1.00 1.00 0.02
902: Ahrs-----	80	Very limited Slope Large stones Dusty	 1.00 0.61 0.01	Very limited Slope Dusty	 1.00 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
903: Ahrs-----	50	Very limited Slope Large stones Dusty	1.00 0.59 0.01	Very limited Slope Dusty	1.00 0.01
Pinecreek-----	30	Very limited Slope Large stones Dusty	1.00 0.02 0.01	Very limited Slope Dusty	1.00 0.01
907: Honeyjones-----	80	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
908: Honeyjones-----	45	Very limited Slope Large stones Dusty	1.00 0.47 0.01	Very limited Slope Dusty	1.00 0.01
Ahrs-----	35	Very limited Slope Large stones Dusty	1.00 0.61 0.01	Very limited Slope Dusty	1.00 0.01
913: Hobo-----	85	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.02	Very limited Slope Depth to saturated zone Dusty	1.00 1.00 0.02
Ac1: Arson-----	40	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.04	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.04
Carlinton-----	35	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.02
Ac2: Arson, dry-----	45	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.05	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.05
Carlinton, dry-----	30	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 24.--Landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Arson, dry-----	55	Very limited Slope Depth to bedrock Dusty	1.00 1.00 0.03	Very limited Slope Depth to bedrock Dusty	1.00 0.61 0.03
Minaloosa, dry-----	20	Very limited Slope Dusty	1.00 0.02	Very limited Slope Dusty	1.00 0.02
Rs2: Reggear, moist-----	40	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03	Very limited Depth to saturated zone Slope Dusty	1.00 1.00 0.03
Stewah-----	25	Very limited Depth to bedrock Slope Dusty	1.00 1.00 0.03	Very limited Slope Dusty	1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.---Potential Source of Gravel, Sand, and Topsoil

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. These interpretations are designed as suitabilities as opposed to limitations. The numbers in the values columns range from 0.00 to 1.00. The smaller the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Thickest layer Bottom layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Too sandy Wetness	0.00 0.00 0.22 0.89
Typic Fluvaquents, protected-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.34
116: Thatuna-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.80
Caldwell-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
118: Thatuna-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.80
Cald-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
120: Latahco-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
121: Latahco-----	60	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
Lovell-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.01
122: Tilma-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.25

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
122: Latah-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.14
124: Caldwell-----	60	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
Cald-----	25	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
125: Lovell-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.01
Porrett-----	20	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
Aquandic Endoaquepts	15	Fair Thickest layer Bottom layer	0.00 0.63	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Hard to reclaim (rock fragments)	0.00 0.00
130: Porrett-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
136: Lovell-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.01
Porrett-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
141: Miesen-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.89
142: Miesen-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.89
Ramsdell-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
143: Miesen, protected, drained-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.89
144: Miesen, protected, drained-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.89
Ramsdell, protected, drained	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
145: Bellslake, protected, drained	80	Poor Organic matter content Thickest layer Bottom layer	0.00 0.00 0.00	Poor Bottom layer Thickest layer Organic matter content	0.00 0.00 0.00	Poor Wetness	0.00
150: Pywell, protected, drained-----	80	Poor Organic matter content Thickest layer Bottom layer	0.00 0.00 0.00	Poor Bottom layer Thickest layer Organic matter content	0.00 0.00 0.00	Poor Wetness Organic matter content high	0.00 0.00
155: Ramsdell-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
156: Ramsdell, protected, drained	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
157: Ramsdell, protected, drained	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
DeVoignes, protected, drained	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Too acid Too clayey	0.00 0.88 0.92

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158: DeVoignes-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Too acid Too clayey	0.00 0.88 0.92
Pywell-----	40	Poor Organic matter content Thickest layer Bottom layer	0.00 0.00 0.00	Poor Bottom layer Thickest layer Organic matter content	0.00 0.00 0.00	Poor Wetness Organic matter content high	0.00 0.00
200: Blinn, stony surface	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.99
201: Blinn, stony surface	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Depth to bedrock	0.00 0.00 0.99
202: Blinn, stony surface	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Depth to bedrock	0.00 0.00 0.99
Bobbitt, stony surface-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Depth to bedrock Rock fragments	0.00 0.05 0.13
210: Agatha, stony surface-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
212: Agatha, stony surface-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
230: Lacy, stony surface	65	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Depth to bedrock Slope Rock fragments	0.00 0.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231: Lacy, very stony surface-----	60	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Depth to bedrock Rock fragments	0.00 0.00 0.88
Rock outcrop-----	25	Not rated		Not rated		Not rated	
232: Lacy, stony surface	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Depth to bedrock Slope Rock fragments	0.00 0.00 0.50
Bobbitt, stony surface-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Depth to bedrock Rock fragments	0.00 0.05 0.13
233: Lacy, very stony surface-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Depth to bedrock Rock fragments	0.00 0.00 0.88
Bobbitt, very stony surface-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Depth to bedrock	0.00 0.00 0.79
250: Dorb, warm, stony surface-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
255: Shayhill, stony surface-----	80	Fair Bottom layer Thickest layer	0.00 0.20	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments)	0.00 0.00 0.00
256: Shayhill, stony surface-----	80	Fair Bottom layer Thickest layer	0.00 0.20	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Hard to reclaim (rock fragments)	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
257: Shayhill, dry, stony surface-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments)	0.00 0.00 0.00
260: Seddow-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.45
261: Sly, dry-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments)	0.00 0.88 0.98
Shayhill, dry-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
262: Seddow-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.45
Sly, dry-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments)	0.00 0.88 0.98
300: Taney-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
301: Taney-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.07 0.37
303: Carlinton-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.84
Benewah-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.04 0.37

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
304: Benewah-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness	0.00 0.04
Santa-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.37
310: Santa-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.02
311: Santa-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.37
314: Sharptop-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Rock fragments	0.37 0.88
Santa-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.37
315: Setters-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Wetness	0.00 0.04
316: Setters-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Wetness	0.00 0.04
Taney-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.07 0.37
320: Reggear-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope Too acid	0.25 0.37 0.50
321: Reggear, moist-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope Too acid	0.25 0.37 0.50
322: Reggear, moist-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope Too acid	0.25 0.37 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
322: Sly-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments)	0.00 0.88 0.98
323: Bechtel-----	50	Good Thickest layer Bottom layer	0.33 0.75	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.50
Reggear-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness Too acid	0.00 0.25 0.50
325: Reggear-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Too acid	0.25 0.50
Sharptop, basalt substratum-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Hard to reclaim (rock fragments)	0.00 0.88
326: Reggear-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope Too acid	0.25 0.37 0.50
Seddow-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.45
330: Carlinton-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.84
Carlinton, dry-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.37
335: Carlinton, dry-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.02 0.16
336: Carlinton, dry-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
336: Taney-----	25	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.07
340: Arson-----	45	Fair Thickest layer Bottom layer	0.00 0.13	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope	0.00 0.00
Lotuspoint-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
341: Sinkler-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments	0.00 0.88
Arson-----	40	Fair Thickest layer Bottom layer	0.00 0.13	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope	0.00 0.00
342: Sinkler, dry-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
Arson, dry-----	40	Fair Thickest layer Bottom layer	0.00 0.13	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope	0.00 0.00
350: Southwick-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.71
351: Southwick-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Wetness	0.37 0.71
353: Tensed-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Hard to reclaim (rock fragments) Wetness Too clayey	0.00 0.08 0.38 0.44
Pedee-----	35	Fair Thickest layer Bottom layer	0.00 0.13	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Wetness Rock fragments	0.00 0.29 0.50

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
354: Tensed-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Rock fragments Hard to reclaim (rock fragments) Wetness Too clayey	0.00 0.00 0.08 0.38 0.44
Pedee-----	35	Fair Thickest layer Bottom layer	0.00 0.13	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Wetness Rock fragments	0.00 0.00 0.29 0.50
355: Southwick-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.71 0.96
Driscoll-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Wetness	0.00 0.38
356: Southwick-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness	0.00 0.71
Driscoll-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Too clayey Wetness	0.00 0.00 0.38
360: Larkin-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Good	
361: Larkin-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
363: Larkin-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Good	
Driscoll-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Wetness Slope	0.00 0.38 0.96
364: Larkin-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Good	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
364: Southwick-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.71
367: Larkin-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
Driscoll-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Too clayey Wetness	0.00 0.00 0.38
400: Driscoll-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Slope Wetness	0.00 0.37 0.38
405: Thatuna-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Wetness	0.04 0.80
Naff-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Too clayey	0.37 0.53
406: Thatuna-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness	0.00 0.80
Naff-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Too clayey	0.00 0.53
410: Palouse-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Good	
Naff-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Too clayey	0.53
411: Palouse-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope	0.37
414: Naff-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Too clayey	0.53
Thatuna-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
415: Naff-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Too clayey Slope	0.53 0.84
Tilma-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.25 0.84
416: Naff-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Too clayey	0.37 0.53
Thatuna-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Wetness	0.04 0.80
417: Naff-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Too clayey	0.37 0.53
Palouse-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
420: Garfield-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Slope	0.00 0.00
Tilma-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.25
421: Naff-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Too clayey Slope	0.53 0.84
Garfield-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Too clayey Slope	0.00 0.00
500: Hobo-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Wetness	0.00 0.00 0.14
Threebear-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.06 0.37

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Hobo, warm-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Wetness	0.00 0.00 0.14
Threebear, warm----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Slope	0.00 0.00
510: Honeyjones-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
Ahrs-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
600: Ardenvoir-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Huckle-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
601: Ardenvoir-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
McCrosket-----	25	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
605: Benewah-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness Slope	0.04 0.37
Rasser-----	35	Poor Bottom layer Thickest layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.37

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
606: Benewah-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness	0.00 0.04
Rasser-----	40	Poor Bottom layer Thickest layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
610: Schumacher-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Slope Hard to reclaim (rock fragments) Rock fragments	0.37 0.68 0.88
611: Schumacher-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.68 0.88
Tekoa-----	40	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.79
612: Libertybutte-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Depth to bedrock Rock fragments Slope	0.00 0.00 0.00
Tekoa-----	40	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.79
613: Ardenvoir, dry-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Lotuspoint-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
614: Ardenvoir, dry-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
614: Lotuspoint-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
617: Tekoa-----	80	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.79
621: Huckle-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
625: Huckle-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
Ardenvoir-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
650: Grangemont-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
651: Kingspeak-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
Shayhill, stony surface-----	30	Fair Bottom layer Thickest layer	0.00 0.20	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Hard to reclaim (rock fragments)	0.00 0.00 0.00
652: Kingspeak-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
653: Kingspeak, cool----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
655: Tigley, moist-----	80	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
656: Kingspeak, dry-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
660: Threebear-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Fair Wetness	0.06
662: Threebear, warm-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Slope	0.00 0.37
663: Threebear, warm-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
Porrett-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness	0.00
665: Grangemont, warm----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
670: Honeyjones, warm----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
671: Honeyjones-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
680: Ardenvoir-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680: Huckle-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
681: Huckle-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Ahrs-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
700: Ardenvoir-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Huckle-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
701: Ardenvoir-----	55	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
McCrosket-----	25	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
703: Ardenvoir, dry-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Ardenvoir-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
704: Ardenvoir, dry-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
Ardenvoir-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
705: Ardenvoir-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
Rasser-----	30	Poor Bottom layer Thickest layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
706: Ardenvoir-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
707: Huckle, dry-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00 0.00
Ardenvoir-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
710: McCrosket-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00
Ardenvoir-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
711: McCrosket-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Ardenvoir-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
712: McCrosket-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Tekoa-----	30	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.79
716: Ahms-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
720: Huckle-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
721: Huckle-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
Ardenvoir-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
735: Lotuspoint, stony surface-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
736: Lotuspoint, stony surface-----	65	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
Rock outcrop-----	15	Not rated		Not rated		Not rated	
756: Tigley-----	80	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
757: Hugus, warm-----	80	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
758: Tigley, moist-----	50	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Hugus-----	35	Fair Thickest layer Bottom layer	0.14 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.13
765: Saint Maries-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Huckle-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
770: Pinecreek-----	80	Poor Thickest layer Bottom layer	0.00 0.03	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
771: Honeyjones, warm----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
772: Honeyjones, warm----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
Ahrs-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
773: Honeyjones, dry----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
774: Pinecreek, moist----	80	Poor Thickest layer Bottom layer	0.00 0.03	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
775: Pinecreek, moist----	80	Poor Thickest layer Bottom layer	0.00 0.03	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
776: Cassymill-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.00
777: Boulder creek, warm--	80	Fair Thickest layer Bottom layer	0.11 0.14	Poor Bottom layer Thickest layer	0.03 0.03	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.13
778: Cassymill-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
778: Lotuspoint-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
779: Bouldercreek-----	80	Fair Thickest layer Bottom layer	0.19 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
780: Ardenvoir-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Huckle-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments	0.00 0.00 0.00
Saint Maries, dry---	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
781: Ahhs, moist-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Honeyjones, warm----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
782: Ardenvoir, dry-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Cassyhill-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
784: Pinecreek, moist----	45	Poor Thickest layer Bottom layer	0.00 0.03	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Lotuspoint-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Rock fragments Slope Depth to bedrock	0.00 0.00 0.21
791: Latour-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
800: Rock outcrop-----	100	Not rated		Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated		Not rated	
802: Kingspeak-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope	0.00
Urban land-----	35	Not rated		Not rated		Not rated	
900: Water-----	100	Not rated		Not rated		Not rated	
901: Aquandic Endoaquepts	40	Fair Thickest layer Bottom layer	0.00 0.63	Poor Bottom layer Thickest layer	0.00 0.00	Poor Wetness Hard to reclaim (rock fragments)	0.00 0.00
Aquic Udifluvents---	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Thickest layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Too sandy Wetness	0.00 0.00 0.22 0.62
902: Ahrs-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
903: Ahrs-----	50	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
903: Pinecreek-----	30	Poor Thickest layer Bottom layer	0.00 0.03	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
907: Honeyjones-----	80	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
908: Honeyjones-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.00
Ahrs-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
913: Hobo-----	85	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Wetness	0.00 0.00 0.14
Ac1: Arson-----	40	Fair Thickest layer Bottom layer	0.11 0.38	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.88
Carlinton-----	35	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness Too acid	0.00 0.13 0.96
Ac2: Arson, dry-----	45	Fair Thickest layer Bottom layer	0.11 0.38	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.88
Carlinton, dry-----	30	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness Too acid	0.00 0.13 0.96

Soil Survey of Benewah County Area, Idaho, Western Part

Table 25.--Potential Source of Gravel, Sand, and Topsoil--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Arson, dry-----	55	Fair Thickest layer Bottom layer	0.11 0.38	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Slope Rock fragments	0.00 0.00 0.88
Minaloosa, dry-----	20	Fair Thickest layer Bottom layer	0.00 0.25	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00
Rs2: Reggear, moist-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00	Poor Slope Wetness	0.00 0.35
Stewah-----	25	Fair Thickest layer Bottom layer	0.38 0.38	Poor Bottom layer Thickest layer	0.00 0.00	Poor Hard to reclaim (rock fragments) Rock fragments Slope	0.00 0.00 0.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.---Potential Source of Reclamation Material and Roadfill

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. These interpretations are designed as suitabilities as opposed to limitations. The numbers in the values columns range from 0.00 to 1.00. The smaller the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Fair Low organic matter content Water erosion Droughty Too acid Cobble content	0.18 0.68 0.89 0.92 0.93	Fair Cobble content Wetness Dusty	0.69 0.89 0.92
Typic Fluvaquents, protected-----	40	Fair Low organic matter content Water erosion Too acid Droughty Cobble content	0.13 0.37 0.68 0.91 0.94	Poor Wetness Dusty Cobble content	0.00 0.97 0.99
116: Thatuna-----	45	Fair Water erosion	0.06	Poor Low strength Dusty Wetness	0.00 0.77 0.80
Caldwell-----	35	Fair Water erosion Low organic matter content Too acid	0.68 0.88 0.99	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.07 0.77 0.87
118: Thatuna-----	50	Fair Water erosion	0.06	Poor Low strength Dusty Wetness	0.00 0.78 0.80
Cald-----	30	Fair Water erosion Too acid	0.68 0.99	Poor Wetness Low strength Dusty Shrink-swell	0.00 0.00 0.78 0.98
120: Latahco-----	80	Fair Water erosion Low organic matter content	0.37 0.50	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.07 0.80 0.95

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
121: Latahco-----	60	Fair Water erosion Low organic matter content	0.37 0.50	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.07 0.80 0.95
Lovell-----	30	Fair Low organic matter content Water erosion Too acid	0.18 0.37 0.92	Poor Low strength Wetness Dusty	0.00 0.01 0.80
122: Tilma-----	45	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.92	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.25 0.78 0.97
Latah-----	40	Fair Water erosion Low organic matter content	0.06 0.13	Poor Low strength Wetness Shrink-swell Dusty	0.00 0.14 0.66 0.78
124: Caldwell-----	60	Fair Water erosion Low organic matter content Too acid	0.68 0.88 0.99	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.07 0.77 0.87
Cald-----	25	Fair Water erosion Too acid	0.68 0.99	Poor Wetness Low strength Dusty Shrink-swell	0.00 0.00 0.77 0.87
125: Lovell-----	55	Fair Low organic matter content Water erosion Too acid	0.18 0.37 0.92	Poor Low strength Wetness Dusty	0.00 0.01 0.80
Porrett-----	20	Fair Water erosion Low organic matter content Too acid	0.37 0.50 0.50	Poor Wetness Low strength Dusty	0.00 0.00 0.80
Aquandic Endoaquepts	15	Fair Water erosion Too acid	0.68 0.84	Poor Wetness Dusty	0.00 0.88

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
130: Porrett-----	80	Fair Water erosion Low organic matter content Too acid	 0.37 0.50 0.50	Poor Wetness Low strength Dusty	 0.00 0.00 0.80
136: Lovell-----	45	Fair Low organic matter content Water erosion Too acid	 0.18 0.37 0.92	Poor Low strength Wetness Dusty	 0.00 0.01 0.80
Porrett-----	40	Fair Water erosion Low organic matter content Too acid	 0.37 0.50 0.50	Poor Wetness Low strength Dusty	 0.00 0.00 0.80
141: Miesen-----	80	Fair Water erosion Too acid	 0.37 0.84	Fair Dusty Wetness	 0.80 0.89
142: Miesen-----	45	Fair Water erosion Too acid	 0.37 0.84	Fair Dusty Wetness	 0.80 0.89
Ramsdell-----	40	Fair Water erosion Too acid	 0.06 0.84	Poor Wetness Dusty	 0.00 0.80
143: Miesen, protected, drained-----	80	Fair Water erosion Too acid	 0.37 0.84	Fair Dusty Wetness	 0.80 0.89
144: Miesen, protected, drained-----	50	Fair Water erosion Too acid	 0.37 0.84	Fair Dusty Wetness	 0.80 0.89
Ramsdell, protected, drained	35	Fair Water erosion Too acid	 0.06 0.84	Poor Wetness Dusty	 0.00 0.80
145: Bellslake, protected, drained	80	Fair Water erosion Too acid	 0.37 0.68	Poor Wetness Dusty	 0.00 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
150: Pywell, protected, drained-----	80	Poor Wind erosion Too acid	0.00 0.84	Poor Wetness Low strength Dusty	0.00 0.00 0.80
155: Ramsdell-----	80	Fair Water erosion Too acid	0.06 0.84	Poor Wetness Dusty	0.00 0.80
156: Ramsdell, protected, drained	80	Fair Water erosion Too acid	0.06 0.84	Poor Wetness Dusty	0.00 0.80
157: Ramsdell, protected, drained	50	Fair Water erosion Too acid	0.06 0.84	Poor Wetness Dusty	0.00 0.80
DeVoignes, protected, drained	30	Fair Too acid Water erosion	0.50 0.99	Poor Wetness Low strength Dusty Shrink-swell	0.00 0.00 0.80 0.87
158: DeVoignes-----	45	Fair Too acid Water erosion	0.50 0.99	Poor Wetness Low strength Dusty Shrink-swell	0.00 0.00 0.80 0.87
Pywell-----	40	Poor Wind erosion Too acid	0.00 0.84	Poor Wetness Low strength Dusty	0.00 0.00 0.80
200: Blinn, stony surface	80	Poor Stone content Too acid Low organic matter content Droughty Depth to bedrock	0.00 0.50 0.50 0.86 0.99	Poor Depth to bedrock Stones Slope Dusty	0.00 0.00 0.50 0.92
201: Blinn, stony surface	80	Poor Stone content Too acid Low organic matter content Droughty Depth to bedrock	0.00 0.50 0.50 0.86 0.99	Poor Slope Depth to bedrock Stones Dusty	0.00 0.00 0.00 0.92

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
202: Blinn, stony surface	55	Poor Stone content Too acid Low organic matter content Droughty Depth to bedrock	 0.00 0.50 0.50 0.86 0.99	Poor Slope Depth to bedrock Stones Dusty	 0.00 0.00 0.00 0.92
Bobbitt, stony surface-----	30	Poor Stone content Droughty Depth to bedrock Too acid	 0.00 0.03 0.05 0.50	Poor Slope Stones Depth to bedrock Low strength Dusty	 0.00 0.00 0.00 0.78 0.85
210: Agatha, stony surface-----	80	Fair Too acid	 0.50	Fair Depth to bedrock Slope Dusty	 0.07 0.50 0.84
212: Agatha, stony surface-----	80	Fair Too acid Droughty	 0.50 0.99	Poor Slope Depth to bedrock Dusty	 0.00 0.07 0.84
230: Lacy, stony surface	65	Poor Stone content Droughty Depth to bedrock Too acid	 0.00 0.00 0.00 0.50	Poor Depth to bedrock Stones Slope Dusty	 0.00 0.00 0.00 0.84
Rock outcrop-----	15	Not rated		Not rated	
231: Lacy, very stony surface-----	60	Poor Stone content Droughty Depth to bedrock Too acid	 0.00 0.00 0.00 0.50	Poor Depth to bedrock Slope Stones Dusty	 0.00 0.00 0.00 0.94
Rock outcrop-----	25	Not rated		Not rated	
232: Lacy, stony surface	55	Poor Stone content Droughty Depth to bedrock Too acid	 0.00 0.00 0.00 0.50	Poor Depth to bedrock Stones Slope Dusty	 0.00 0.00 0.00 0.84

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
232: Bobbitt, stony surface-----	30	Poor Stone content Droughty Depth to bedrock Too acid	0.00 0.03 0.05 0.50	Poor Stones Depth to bedrock Slope Low strength Dusty	0.00 0.00 0.50 0.78 0.84
233: Lacy, very stony surface-----	55	Poor Stone content Droughty Depth to bedrock Too acid	0.00 0.00 0.00 0.50	Poor Depth to bedrock Slope Stones Dusty	0.00 0.00 0.00 0.94
Bobbitt, very stony surface-----	30	Poor Stone content Droughty Too acid Depth to bedrock	0.00 0.31 0.50 0.79	Poor Slope Stones Depth to bedrock Cobble content Dusty	0.00 0.00 0.00 0.55 0.96
250: Dorb, warm, stony surface-----	80	Fair Cobble content Too acid	0.12 0.50	Poor Slope Cobble content Depth to bedrock	0.00 0.00 0.39
255: Shayhill, stony surface	80	Fair Stone content Too acid Low organic matter content	0.02 0.32 0.50	Poor Slope Stones Dusty Cobble content	0.00 0.21 0.82 0.84
256: Shayhill, stony surface-----	80	Fair Stone content Too acid Low organic matter content	0.02 0.32 0.50	Poor Slope Stones Dusty Cobble content	0.00 0.18 0.82 0.89
257: Shayhill, dry, stony surface-----	80	Fair Too acid Low organic matter content Cobble content	0.50 0.50 0.68	Poor Slope Cobble content Dusty	0.00 0.13 0.82

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
260: Seddow-----	80	Fair		Poor	
		Too acid	0.50	Slope	0.00
		Low organic	0.50	Depth to bedrock	0.16
		matter content		Low strength	0.78
		Water erosion	0.68	Dusty	0.80
				Shrink-swell	0.95
261: Sly, dry-----	45	Fair		Poor	
		Low organic	0.18	Slope	0.00
		matter content		Low strength	0.00
		Water erosion	0.37	Dusty	0.80
		Too acid	0.50		
Shayhill, dry-----	40	Fair		Poor	
		Too acid	0.32	Slope	0.00
		Low organic	0.50	Cobble content	0.54
		matter content		Stones	0.67
		Stone content	0.51	Dusty	0.81
		Cobble content	0.82		
262: Seddow-----	45	Fair		Poor	
		Too acid	0.50	Slope	0.00
		Low organic	0.50	Depth to bedrock	0.16
		matter content		Low strength	0.78
		Water erosion	0.90	Dusty	0.80
				Shrink-swell	0.95
Sly, dry-----	40	Fair		Poor	
		Low organic	0.18	Slope	0.00
		matter content		Low strength	0.00
		Too acid	0.50	Dusty	0.80
		Water erosion	0.90		
300: Taney-----	80	Fair		Poor	
		Too acid	0.12	Low strength	0.00
		Low organic	0.13	Wetness	0.07
		matter content		Dusty	0.80
		Water erosion	0.90		
301: Taney-----	80	Fair		Poor	
		Water erosion	0.06	Low strength	0.00
		Too acid	0.12	Wetness	0.07
		Low organic	0.13	Dusty	0.80
		matter content			
303: Carlinton-----	45	Fair		Poor	
		Water erosion	0.06	Low strength	0.00
		Too acid	0.39	Wetness	0.02
		Low organic	0.50	Dusty	0.80
		matter content			

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Benewah-----	40	Fair Water erosion Low organic matter content Too acid	 0.06 0.18 0.50	Poor Low strength Wetness Dusty	 0.00 0.04 0.80
304: Benewah-----	45	Fair Water erosion Low organic matter content Too acid	 0.06 0.18 0.50	Poor Low strength Wetness Dusty	 0.00 0.04 0.80
Santa-----	35	Fair Too acid Water erosion Low organic matter content	 0.32 0.37 0.88	Fair Wetness Dusty	 0.02 0.80
310: Santa-----	80	Fair Water erosion Too acid Low organic matter content	 0.06 0.32 0.88	Fair Wetness Dusty	 0.02 0.80
311: Santa-----	80	Fair Too acid Water erosion Low organic matter content	 0.32 0.37 0.88	Fair Wetness Dusty	 0.02 0.80
314: Sharptop-----	45	Fair Low organic matter content Too acid Water erosion	 0.13 0.32 0.37	Fair Depth to bedrock Dusty	 0.46 0.80
Santa-----	40	Fair Too acid Water erosion Low organic matter content	 0.32 0.37 0.88	Fair Wetness Dusty	 0.02 0.80
315: Setters-----	80	Fair Low organic matter content Water erosion Too acid Too clayey	 0.08 0.37 0.68 0.99	Poor Low strength Wetness Shrink-swell Dusty	 0.00 0.04 0.49 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Setters-----	50	Fair Low organic matter content Water erosion Too acid Too clayey	0.08 0.37 0.54 0.99	Poor Low strength Wetness Shrink-swell Dusty	0.00 0.04 0.49 0.80
Taney-----	30	Fair Too acid Low organic matter content Water erosion	0.12 0.13 0.90	Poor Low strength Wetness Dusty	0.00 0.07 0.80
320: Reggear-----	80	Fair Low organic matter content Water erosion Too acid Droughty	0.18 0.37 0.50 0.82	Poor Low strength Wetness Dusty	0.00 0.25 0.80
321: Reggear, moist-----	80	Fair Low organic matter content Too acid Droughty Water erosion	0.18 0.50 0.86 0.99	Poor Low strength Wetness Dusty	0.00 0.25 0.80
322: Reggear, moist-----	50	Fair Low organic matter content Too acid Droughty Water erosion	0.18 0.50 0.86 0.99	Poor Low strength Wetness Dusty	0.00 0.25 0.80
Sly-----	30	Fair Low organic matter content Water erosion Too acid	0.18 0.37 0.50	Poor Low strength Slope Dusty	0.00 0.50 0.80
323: Bechtel-----	50	Fair Low organic matter content Too acid Water erosion	0.08 0.50 0.68	Poor Slope Dusty Depth to bedrock	0.00 0.84 0.95
Reggear-----	35	Fair Low organic matter content Water erosion Too acid Droughty	0.18 0.37 0.50 0.82	Poor Low strength Slope Wetness Dusty	0.00 0.08 0.25 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325: Reggear-----	55	Fair Low organic matter content Too acid Droughty Water erosion	 0.18 0.50 0.82 0.99	Poor Low strength Wetness Dusty	 0.00 0.25 0.80
Sharptop, basalt substratum-----	30	Fair Low organic matter content Too acid Water erosion	 0.13 0.32 0.37	Fair Depth to bedrock Dusty	 0.29 0.80
326: Reggear-----	50	Fair Low organic matter content Water erosion Too acid Droughty	 0.18 0.37 0.50 0.82	Poor Low strength Wetness Dusty	 0.00 0.25 0.80
Seddow-----	35	Fair Too acid Low organic matter content Water erosion	 0.50 0.50 0.90	Fair Depth to bedrock Low strength Dusty Shrink-swell	 0.16 0.78 0.80 0.95
330: Carlinton-----	50	Fair Water erosion Too acid Low organic matter content	 0.06 0.39 0.50	Poor Low strength Wetness Dusty	 0.00 0.02 0.80
Carlinton, dry-----	30	Fair Water erosion Too acid Low organic matter content	 0.06 0.39 0.50	Poor Low strength Wetness Dusty	 0.00 0.02 0.80
335: Carlinton, dry-----	80	Fair Water erosion Too acid Low organic matter content	 0.06 0.39 0.50	Poor Low strength Wetness Dusty	 0.00 0.02 0.80
336: Carlinton, dry-----	55	Fair Water erosion Too acid Low organic matter content	 0.06 0.39 0.50	Poor Low strength Wetness Dusty	 0.00 0.02 0.80
Taney-----	25	Fair Too acid Low organic matter content Water erosion	 0.12 0.13 0.37	Poor Low strength Wetness Dusty	 0.00 0.07 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
340: Arson-----	45	Fair Too acid Low organic matter content	0.32 0.50	Poor Slope Low strength Dusty Depth to bedrock	0.00 0.22 0.80 0.98
Lotuspoint-----	35	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Depth to bedrock Slope Stones Cobble content Dusty	0.00 0.00 0.00 0.41 0.91
341: Sinkler-----	45	Fair Low organic matter content Too acid Water erosion	0.13 0.32 0.37	Poor Low strength Slope Dusty	0.00 0.02 0.80
Arson-----	40	Fair Too acid Low organic matter content	0.32 0.50	Poor Slope Low strength Dusty Depth to bedrock	0.00 0.22 0.80 0.98
342: Sinkler, dry-----	45	Fair Low organic matter content Too acid Water erosion	0.13 0.32 0.90	Poor Low strength Slope Dusty	0.00 0.02 0.80
Arson, dry-----	40	Fair Too acid Low organic matter content Water erosion	0.32 0.50 0.90	Poor Slope Low strength Dusty Depth to bedrock	0.00 0.22 0.80 0.98
350: Southwick-----	80	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.80	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.71 0.78 0.99
351: Southwick-----	80	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.80	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.71 0.78 0.99
353: Tensed-----	50	Fair Low organic matter content Too acid Water erosion	0.50 0.54 0.68	Fair Wetness Dusty Shrink-swell	0.38 0.86 0.98

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
353: Pedee-----	35	Fair Low organic matter content Too acid	0.08 0.50	Fair Wetness Dusty Shrink-swell	0.29 0.85 0.97
354: Tensed-----	50	Fair Low organic matter content Too acid Water erosion	0.50 0.54 0.68	Fair Wetness Slope Dusty Shrink-swell	0.38 0.82 0.86 0.98
Pedee-----	35	Fair Low organic matter content Too acid	0.08 0.50	Fair Wetness Slope Dusty Shrink-swell	0.29 0.50 0.85 0.97
355: Southwick-----	55	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.80	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.71 0.78 0.99
Driscoll-----	30	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.74	Poor Low strength Wetness Shrink-swell Dusty	0.00 0.38 0.51 0.78
356: Southwick-----	55	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.80	Poor Low strength Wetness Dusty Slope Shrink-swell	0.00 0.71 0.78 0.82 0.99
Driscoll-----	30	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.74	Poor Low strength Wetness Shrink-swell Slope Dusty	0.00 0.38 0.58 0.68 0.78
360: Larkin-----	80	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.80	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.91
361: Larkin-----	80	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.80	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.91

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363: Larkin-----	55	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.80	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.91
Driscoll-----	30	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.74	Poor Low strength Wetness Shrink-swell Dusty	0.00 0.38 0.58 0.78
364: Larkin-----	50	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.80	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.91
Southwick-----	35	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.80	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.71 0.78 0.99
367: Larkin-----	55	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.80	Poor Low strength Slope Dusty Shrink-swell	0.00 0.32 0.78 0.91
Driscoll-----	30	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.74	Poor Low strength Wetness Shrink-swell Slope Dusty	0.00 0.38 0.64 0.68 0.78
400: Driscoll-----	80	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.74	Poor Low strength Wetness Shrink-swell Dusty	0.00 0.38 0.51 0.78
405: Thatuna-----	45	Fair Water erosion	0.06	Poor Low strength Dusty Wetness	0.00 0.78 0.80
Naff-----	40	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
406: Thatuna-----	50	Fair Water erosion	0.06	Poor Slope Low strength Dusty Wetness	0.00 0.00 0.78 0.80
Naff-----	40	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Slope Low strength Dusty Shrink-swell	0.00 0.00 0.78 0.87
410: Palouse-----	50	Fair Low organic matter content Water erosion Too acid	0.13 0.37 0.68	Poor Low strength Dusty	0.00 0.78
Naff-----	35	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
411: Palouse-----	80	Fair Low organic matter content Water erosion Too acid	0.13 0.37 0.68	Poor Low strength Dusty	0.00 0.78
414: Naff-----	45	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
Thatuna-----	40	Fair Water erosion	0.06	Poor Low strength Dusty Wetness	0.00 0.78 0.80
415: Naff-----	50	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
Tilma-----	35	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.92	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.25 0.78 0.97

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
416: Naff-----	45	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
Thatuna-----	40	Fair Water erosion	0.06	Poor Low strength Dusty Wetness	0.00 0.78 0.80
417: Naff-----	45	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
Palouse-----	40	Fair Low organic matter content Water erosion Too acid	0.13 0.37 0.68	Poor Low strength Dusty	0.00 0.78
420: Garfield-----	45	Fair Too clayey Low organic matter content Water erosion Too acid	0.11 0.13 0.90 0.97	Poor Low strength Shrink-swell Dusty	0.00 0.31 0.78
Tilma-----	35	Fair Water erosion Low organic matter content Too acid	0.06 0.13 0.92	Poor Low strength Wetness Dusty Shrink-swell	0.00 0.25 0.78 0.97
421: Naff-----	55	Fair Low organic matter content Water erosion Too acid	0.13 0.68 0.99	Poor Low strength Dusty Shrink-swell	0.00 0.78 0.87
Garfield-----	30	Fair Low organic matter content Too clayey Water erosion Too acid	0.13 0.31 0.68 0.97	Poor Low strength Shrink-swell Dusty Slope	0.00 0.31 0.78 0.82
500: Hobo-----	50	Poor Wind erosion Low organic matter content Too acid Water erosion	0.00 0.08 0.32 0.37	Fair Wetness Slope Dusty	0.14 0.50 0.84

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
500: Threebear-----	35	Poor Wind erosion Too acid Low organic matter content Water erosion	 0.00 0.03 0.18 0.37	Poor Low strength Wetness Dusty	 0.00 0.06 0.80
501: Hobo, warm-----	45	Poor Wind erosion Low organic matter content Too acid Water erosion	 0.00 0.08 0.32 0.37	Poor Slope Wetness Dusty	 0.00 0.14 0.84
Threebear, warm----	40	Poor Wind erosion Too acid Low organic matter content Water erosion	 0.00 0.03 0.18 0.37	Poor Wetness Low strength Dusty	 0.00 0.00 0.80
510: Honeyjones-----	45	Poor Wind erosion Low organic matter content Stone content Too acid	 0.00 0.01 0.08 0.32	Poor Slope Dusty	 0.00 0.87
Ahrs-----	35	Fair Low organic matter content Too acid Cobble content	 0.18 0.32 0.39	Poor Slope Cobble content Dusty	 0.00 0.43 0.87
600: Ardenvoir-----	50	Fair Low organic matter content Too acid Droughty Cobble content	 0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	 0.00 0.39 0.94 0.97
Huckle-----	35	Poor Wind erosion Too acid Cobble content Low organic matter content	 0.00 0.50 0.85 0.88	Fair Cobble content Depth to bedrock Slope Dusty	 0.29 0.29 0.50 0.88
601: Ardenvoir-----	55	Fair Low organic matter content Too acid Droughty Cobble content	 0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	 0.00 0.39 0.94 0.97

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
601: McCrosket-----	25	Fair Too acid Cobble content Droughty	 0.50 0.82 0.88	Poor Slope Depth to bedrock Cobble content Dusty	 0.00 0.04 0.09 0.92
605: Benewah-----	45	Fair Water erosion Low organic matter content Too acid	 0.06 0.18 0.50	Poor Low strength Wetness Dusty	 0.00 0.04 0.80
Rasser-----	35	Fair Too acid Low organic matter content Water erosion	 0.32 0.50 0.68	Fair Dusty	 0.83
606: Benewah-----	45	Fair Water erosion Low organic matter content Too acid	 0.06 0.18 0.50	Poor Slope Low strength Wetness Dusty	 0.00 0.00 0.04 0.80
Rasser-----	40	Fair Too acid Low organic matter content Water erosion	 0.32 0.50 0.68	Poor Slope Dusty	 0.00 0.83
610: Schumacher-----	80	Fair Too acid	 0.32	Poor Low strength Depth to bedrock Dusty Shrink-swell	 0.00 0.29 0.79 0.99
611: Schumacher-----	45	Fair Too acid	 0.32	Poor Slope Low strength Depth to bedrock Dusty Shrink-swell	 0.00 0.22 0.29 0.78 0.99
Tekoa-----	40	Fair Droughty Depth to bedrock	 0.13 0.79	Poor Slope Depth to bedrock Cobble content Dusty	 0.00 0.00 0.58 0.78
612: Libertybutte-----	45	Poor Droughty Depth to bedrock Too acid	 0.00 0.00 0.99	Poor Depth to bedrock Slope Dusty	 0.00 0.00 0.78

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612: Tekoa-----	40	Fair Droughty Depth to bedrock	0.13 0.79	Poor Depth to bedrock Slope Cobble content Dusty	0.00 0.00 0.58 0.78
613: Ardenvoir, dry-----	50	Poor Stone content Low organic matter content Too acid Cobble content	0.00 0.02 0.32 0.65	Fair Cobble content Slope Dusty	0.13 0.50 0.97
Lotuspoint-----	35	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.41 0.90
614: Ardenvoir, dry-----	50	Poor Stone content Low organic matter content Too acid Cobble content	0.00 0.02 0.32 0.65	Poor Slope Cobble content Dusty	0.00 0.13 0.97
Lotuspoint-----	35	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Slope Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.00 0.41 0.90
617: Tekoa-----	80	Fair Droughty Depth to bedrock	0.13 0.79	Poor Depth to bedrock Slope Cobble content Dusty	0.00 0.00 0.58 0.78
621: Huckle-----	80	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
625: Huckle-----	45	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88
Ardenvoir-----	40	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
650: Grangemont-----	80	Poor Wind erosion Low organic matter content Too acid Water erosion	0.00 0.08 0.32 0.99	Poor Low strength Dusty	0.00 0.80
651: Kingspeak-----	55	Fair Low organic matter content Water erosion Too acid	0.08 0.37 0.50	Fair Slope Dusty	0.50 0.87
Shayhill, stony surface-----	30	Fair Stone content Too acid Low organic matter content	0.02 0.32 0.50	Poor Slope Stones Dusty Cobble content	0.00 0.21 0.82 0.84
652: Kingspeak-----	80	Fair Low organic matter content Water erosion Too acid	0.08 0.37 0.50	Fair Dusty	0.87
653: Kingspeak, cool-----	80	Fair Low organic matter content Water erosion Too acid	0.08 0.37 0.50	Fair Slope Dusty	0.82 0.87
655: Tigley, moist-----	80	Fair Low organic matter content Too acid	0.18 0.50	Poor Slope Dusty	0.00 0.86

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
656: Kingspeak, dry-----	80	Fair Low organic matter content Water erosion Too acid	0.08 0.37 0.50	Fair Slope Dusty	0.82 0.87
660: Threebear-----	80	Poor Wind erosion Too acid Low organic matter content Water erosion	0.00 0.03 0.18 0.37	Poor Low strength Wetness Dusty	0.00 0.06 0.80
662: Threebear, warm-----	80	Poor Wind erosion Too acid Low organic matter content Water erosion	0.00 0.03 0.18 0.37	Poor Wetness Low strength Dusty	0.00 0.00 0.80
663: Threebear, warm-----	50	Poor Wind erosion Too acid Low organic matter content Water erosion	0.00 0.03 0.18 0.37	Poor Wetness Low strength Dusty	0.00 0.00 0.80
Porrett-----	35	Fair Water erosion Low organic matter content Too acid	0.37 0.50 0.50	Poor Wetness Low strength Dusty	0.00 0.00 0.80
665: Grangemont, warm----	80	Poor Wind erosion Low organic matter content Too acid Water erosion	0.00 0.08 0.32 0.37	Poor Low strength Dusty	0.00 0.80
670: Honeyjones, warm----	80	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
671: Honeyjones-----	80	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
680: Ardenvoir-----	45	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Fair Depth to bedrock Cobble content Dusty	0.39 0.94 0.97
Huckle-----	40	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Fair Cobble content Depth to bedrock Dusty	0.29 0.29 0.88
681: Huckle-----	45	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Fair Cobble content Depth to bedrock Dusty	0.29 0.29 0.88
Ahrs-----	35	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Fair Cobble content Dusty	0.43 0.87
700: Ardenvoir-----	50	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
Huckle-----	35	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88
701: Ardenvoir-----	55	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
McCrosket-----	25	Fair Too acid Cobble content Droughty	0.50 0.82 0.88	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.04 0.09 0.92

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
703: Ardenvoir, dry-----	45	Poor Stone content Low organic matter content Too acid Cobble content	0.00 0.02 0.32 0.65	Poor Slope Cobble content Dusty	0.00 0.13 0.97
Ardenvoir-----	40	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
704: Ardenvoir, dry-----	45	Poor Stone content Low organic matter content Too acid Cobble content	0.00 0.02 0.32 0.65	Poor Slope Cobble content Dusty	0.00 0.13 0.97
Ardenvoir-----	40	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
705: Ardenvoir-----	50	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
Rasser-----	30	Fair Too acid Low organic matter content Water erosion	0.32 0.50 0.68	Poor Slope Dusty	0.00 0.83
706: Ardenvoir-----	80	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
707: Huckle, dry-----	50	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
707: Ardenvoir-----	35	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
710: McCrosket-----	50	Fair Too acid Cobble content Droughty	0.50 0.82 0.88	Fair Slope Depth to bedrock Cobble content Dusty	0.02 0.04 0.09 0.92
Ardenvoir-----	30	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
711: McCrosket-----	50	Fair Too acid Cobble content Droughty	0.50 0.82 0.88	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.04 0.09 0.92
Ardenvoir-----	30	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
712: McCrosket-----	50	Fair Too acid Cobble content Droughty	0.50 0.82 0.88	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.04 0.09 0.92
Tekoa-----	30	Fair Droughty Depth to bedrock	0.13 0.79	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.00 0.58 0.79
716: Ahrs-----	80	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Poor Slope Cobble content Dusty	0.00 0.43 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
720: Huckle-----	80	Poor Wind erosion Too acid Cobble content Low organic matter content	0.00 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88
721: Huckle-----	50	Poor Wind erosion Too acid Cobble content Low organic matter content	0.00 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88
Ardenvoir-----	35	Fair Low organic matter content Too acid Droughty Cobble content	0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	0.00 0.39 0.94 0.97
735: Lotuspoint, stony surface-----	80	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Slope Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.00 0.41 0.91
736: Lotuspoint, stony surface-----	65	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Slope Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.00 0.41 0.91
Rock outcrop-----	15	Not rated		Not rated	
756: Tigley-----	80	Fair Low organic matter content Too acid	0.18 0.50	Poor Slope Dusty	0.00 0.86
757: Hugus, warm-----	80	Poor Wind erosion Too acid Water erosion	0.00 0.32 0.68	Poor Slope Dusty	0.00 0.85

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
758: Tigley, moist-----	50	Fair Low organic matter content Too acid	0.18 0.50	Poor Slope Dusty	0.00 0.86
Hugus-----	35	Poor Wind erosion Too acid Low organic matter content Water erosion	0.00 0.32 0.50 0.68	Poor Slope Dusty	0.00 0.85
765: Saint Maries-----	45	Fair Too acid Cobble content Droughty Low organic matter content	0.32 0.74 0.78 0.92	Poor Slope Cobble content Dusty	0.00 0.75 0.96
Huckle-----	35	Poor Wind erosion Water erosion Too acid Cobble content Low organic matter content	0.00 0.37 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	0.00 0.29 0.29 0.88
770: Pinecreek-----	80	Fair Low organic matter content Too acid Stone content	0.32 0.50 0.97	Poor Slope Dusty	0.00 0.80
771: Honeyjones, warm----	80	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
772: Honeyjones, warm----	45	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
Ahrs-----	35	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Poor Slope Cobble content Dusty	0.00 0.43 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
773: Honeyjones, dry-----	80	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
774: Pinecreek, moist----	80	Poor Wind erosion Low organic matter content Too acid Water erosion Stone content	0.00 0.32 0.50 0.68 0.97	Poor Slope Dusty	0.00 0.80
775: Pinecreek, moist----	80	Fair Low organic matter content Too acid Stone content	0.32 0.50 0.97	Poor Slope Dusty	0.00 0.80
776: Cassychill-----	80	Poor Droughty Depth to bedrock Too acid	0.00 0.00 0.50	Poor Depth to bedrock Slope Dusty Cobble content	0.00 0.00 0.91 0.99
777: Boulder creek, warm--	80	Poor Wind erosion Low organic matter content Too acid Water erosion	0.00 0.02 0.32 0.68	Poor Slope Dusty	0.00 0.91
778: Cassychill-----	50	Poor Droughty Depth to bedrock Too acid	0.00 0.00 0.50	Poor Depth to bedrock Dusty Cobble content	0.00 0.91 0.99
Lotuspoint-----	35	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.41 0.91
779: Boulder creek-----	80	Poor Wind erosion Low organic matter content Too acid Water erosion Droughty	0.00 0.02 0.32 0.68 0.97	Poor Slope Cobble content Dusty	0.00 0.16 0.89

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
780: Ardenvoir-----	30	Fair Low organic matter content Too acid Droughty Cobble content	 0.08 0.50 0.99 0.99	Poor Slope Depth to bedrock Cobble content Dusty	 0.00 0.39 0.94 0.97
Huckle-----	30	Poor Wind erosion Too acid Cobble content Low organic matter content	 0.00 0.50 0.85 0.88	Poor Slope Cobble content Depth to bedrock Dusty	 0.00 0.29 0.29 0.88
Saint Maries, dry---	30	Fair Cobble content Low organic matter content Too acid Droughty	 0.02 0.08 0.32 0.88	Poor Slope Cobble content Dusty	 0.00 0.00 0.87
781: Ahms, moist-----	45	Fair Too acid Low organic matter content Cobble content	 0.32 0.88 0.93	Poor Slope Cobble content Dusty	 0.00 0.26 0.88
Honeyjones, warm----	35	Poor Wind erosion Low organic matter content Stone content Too acid	 0.00 0.01 0.08 0.32	Poor Slope Dusty	 0.00 0.87
782: Ardenvoir, dry-----	45	Poor Stone content Low organic matter content Too acid Cobble content	 0.00 0.02 0.32 0.65	Poor Slope Cobble content Dusty	 0.00 0.13 0.97
Cassychill-----	35	Poor Droughty Depth to bedrock Too acid	 0.00 0.00 0.50	Poor Depth to bedrock Slope Dusty Cobble content	 0.00 0.00 0.91 0.99
784: Pinecreek, moist----	45	Fair Low organic matter content Too acid Stone content	 0.32 0.50 0.97	Poor Slope Dusty	 0.00 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
784: Lotuspoint-----	35	Poor Stone content Droughty Low organic matter content Depth to bedrock Too acid	0.00 0.01 0.18 0.21 0.50	Poor Slope Depth to bedrock Stones Cobble content Dusty	0.00 0.00 0.00 0.41 0.91
791: Latour-----	80	Poor Stone content Too acid Cobble content	0.00 0.32 0.53	Poor Slope Cobble content Stones Dusty	0.00 0.00 0.40 0.88
800: Rock outcrop-----	100	Not rated		Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Fair Low organic matter content Water erosion Too acid	0.08 0.37 0.50	Fair Slope Dusty	0.50 0.87
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Fair Water erosion Too acid	0.68 0.84	Poor Wetness Dusty	0.00 0.88
Aquic Udifluvents---	40	Fair Low organic matter content Water erosion Droughty Too acid Cobble content	0.18 0.68 0.89 0.92 0.93	Fair Wetness Cobble content Dusty	0.62 0.69 0.92
902: Ahrs-----	80	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Poor Slope Cobble content Dusty	0.00 0.43 0.87
903: Ahrs-----	50	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Poor Slope Cobble content Dusty	0.00 0.43 0.87

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
903: Pinecreek-----	30	Fair Low organic matter content Too acid Stone content	0.32 0.50 0.97	Poor Slope Dusty	0.00 0.80
907: Honeyjones-----	80	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
908: Honeyjones-----	45	Poor Wind erosion Low organic matter content Stone content Too acid	0.00 0.01 0.08 0.32	Poor Slope Dusty	0.00 0.87
Ahrs-----	35	Fair Low organic matter content Too acid Cobble content	0.18 0.32 0.39	Poor Slope Cobble content Dusty	0.00 0.43 0.87
913: Hobo-----	85	Poor Wind erosion Low organic matter content Too acid	0.00 0.08 0.32	Poor Slope Wetness Dusty	0.00 0.14 0.84
Ac1: Arson-----	40	Fair Low organic matter content Too acid	0.01 0.50	Poor Slope Depth to bedrock Dusty	0.00 0.39 0.80
Carlinton-----	35	Fair Too acid Low organic matter content Water erosion	0.32 0.32 0.68	Poor Low strength Wetness Slope Dusty	0.00 0.13 0.50 0.80
Ac2: Arson, dry-----	45	Fair Low organic matter content Too acid	0.01 0.50	Fair Depth to bedrock Slope Dusty	0.39 0.50 0.80
Carlinton, dry-----	30	Fair Too acid Low organic matter content Water erosion	0.32 0.32 0.99	Poor Low strength Wetness Slope Dusty Shrink-swell	0.00 0.13 0.50 0.80 0.99

Soil Survey of Benewah County Area, Idaho, Western Part

Table 26.--Potential Source of Reclamation Material and Roadfill--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
An4: Arson, dry-----	55	Fair Low organic matter content Too acid	0.01 0.50	Poor Slope Depth to bedrock Dusty	0.00 0.39 0.80
Minaloosa, dry-----	20	Fair Too acid Water erosion	0.32 0.90	Poor Slope Dusty	0.00 0.96
Rs2: Reggear, moist-----	40	Fair Low organic matter content Too acid Water erosion	0.18 0.50 0.90	Poor Low strength Wetness Slope Shrink-swell Dusty	0.00 0.35 0.50 0.59 0.80
Stewah-----	25	Fair Low organic matter content Too acid	0.41 0.50	Poor Slope Dusty	0.00 0.80

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
105: Aquic Udifluvents, protected-----	45	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone Dusty	1.00 0.86 0.03
Typic Fluvaquents, protected-----	40	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.03
116: Thatuna-----	45	Somewhat limited Seepage	0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.25
Caldwell-----	35	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.25
118: Thatuna-----	50	Somewhat limited Seepage Slope	0.70 0.32	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.22
Cald-----	30	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.22
120: Latahco-----	80	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.07
121: Latahco-----	60	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.07

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
121: Lovell-----	30	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.07
122: Tilma-----	45	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.22
Latah-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.22
124: Caldwell-----	60	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.25
Cald-----	25	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.25
125: Lovell-----	55	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Porrett-----	20	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Aquandic Endoaquepts	15	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.02
130: Porrett-----	80	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.01
136: Lovell-----	45	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
136: Porrett-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
141: Miesen-----	80	Somewhat limited Seepage	0.70	Very limited Piping Depth to saturated zone Dusty	1.00 0.86 0.04
142: Miesen-----	45	Somewhat limited Seepage	0.70	Very limited Piping Depth to saturated zone Dusty	1.00 0.86 0.04
Ramsdell-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.04
143: Miesen, protected, drained-----	80	Somewhat limited Seepage	0.70	Very limited Piping Depth to saturated zone Dusty	1.00 0.86 0.04
144: Miesen, protected, drained-----	50	Somewhat limited Seepage	0.70	Very limited Piping Depth to saturated zone Dusty	1.00 0.86 0.04
Ramsdell, protected, drained	35	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.04
145: Bellslake, protected, drained	80	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Seepage Dusty	1.00 1.00 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
150: Pywell, protected, drained-----	80	Somewhat limited Seepage	0.70	Very limited Organic matter content Depth to saturated zone Seepage Hard to pack Dusty	1.00 1.00 1.00 1.00 0.03
155: Ramsdell-----	80	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.04
156: Ramsdell, protected, drained	80	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.04
157: Ramsdell, protected, drained	50	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.04
DeVoignes, protected, drained	30	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Hard to pack Dusty	1.00 1.00 0.04
158: DeVoignes-----	45	Somewhat limited Seepage	0.70	Very limited Ponding Depth to saturated zone Hard to pack Dusty	1.00 1.00 1.00 0.04
Pywell-----	40	Somewhat limited Seepage	0.70	Very limited Organic matter content Ponding Depth to saturated zone Seepage Hard to pack	1.00 1.00 1.00 1.00 1.00

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
200: Blinn, stony surface	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.52	Somewhat limited Thin layer Large stones Dusty	0.59 0.22 0.02
201: Blinn, stony surface	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.52	Somewhat limited Thin layer Large stones Dusty	0.59 0.22 0.02
202: Blinn, stony surface	55	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.52	Somewhat limited Thin layer Large stones Dusty	0.59 0.22 0.02
Bobbitt, stony surface-----	30	Very limited Slope Depth to bedrock Seepage	1.00 0.99 0.70	Somewhat limited Thin layer Piping Large stones Dusty	0.99 0.50 0.42 0.08
210: Agatha, stony surface-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.34	Somewhat limited Thin layer Dusty	0.42 0.03
212: Agatha, stony surface-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.34	Somewhat limited Thin layer Dusty	0.42 0.03
230: Lacy, stony surface	65	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Large stones Piping Dusty	1.00 0.82 0.50 0.10
Rock outcrop-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Not rated	
231: Lacy, very stony surface-----	60	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Large stones Piping Dusty	1.00 1.00 0.50 0.07
Rock outcrop-----	25	Very limited Slope Depth to bedrock	1.00 1.00	Not rated	

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
232: Lacy, stony surface	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Large stones Piping Dusty	1.00 0.82 0.50 0.10
Bobbitt, stony surface-----	30	Very limited Slope Depth to bedrock Seepage	1.00 0.99 0.70	Somewhat limited Thin layer Piping Large stones Dusty	0.99 0.50 0.42 0.10
233: Lacy, very stony surface-----	55	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Large stones Piping Dusty	1.00 1.00 0.50 0.07
Bobbitt, very stony surface-----	30	Very limited Slope Depth to bedrock Seepage	1.00 0.77 0.70	Somewhat limited Thin layer Large stones Piping Dusty	0.83 0.82 0.50 0.07
250: Dorb, warm, stony surface-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.16	Somewhat limited Large stones Thin layer Dusty	0.73 0.22 0.01
255: Shayhill, stony surface-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Dusty	0.18 0.02
256: Shayhill, stony surface-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Dusty	0.15 0.01
257: Shayhill, dry, stony surface-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Dusty	0.23 0.03
260: Seddow-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.26	Somewhat limited Thin layer Dusty	0.34 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
261: Sly, dry-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
Shayhill, dry-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Dusty	0.24 0.02
262: Seddow-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.26	Somewhat limited Thin layer Dusty	0.34 0.02
Sly, dry-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
300: Taney-----	80	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
301: Taney-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
303: Carlinton-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
Benewah-----	40	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
304: Benewah-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.03
Santa-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.03

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
310: Santa-----	80	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
311: Santa-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
314: Sharptop-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Dusty	0.50 0.19 0.02
Santa-----	40	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.02
315: Setters-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
316: Setters-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
Taney-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
320: Reggear-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
321: Reggear, moist-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.01
322: Reggear, moist-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
322: Sly-----	30	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
323: Bechtel-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Thin layer Dusty	0.14 0.03 0.02
Reggear-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
325: Reggear-----	55	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Dusty	1.00 0.02
Sharptop, basalt substratum-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Dusty	0.26 0.02
326: Reggear-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Seddow-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.26	Somewhat limited Thin layer Dusty	0.34 0.02
330: Carlinton-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
Carlinton, dry-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
335: Carlinton, dry-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
336: Carlinton, dry-----	55	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Dusty	1.00 0.04
Taney-----	25	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.04
340: Arson-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Thin layer Dusty	0.50 0.02 0.02
Lotuspoint-----	35	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.05
341: Sinkler-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
Arson-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty Thin layer	0.50 0.02 0.02
342: Sinkler, dry-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
Arson, dry-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty Thin layer	0.50 0.02 0.02
350: Southwick-----	80	Somewhat limited Seepage Slope	0.70 0.32	Somewhat limited Depth to saturated zone Piping Dusty	0.97 0.50 0.19
351: Southwick-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.97 0.50 0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
353: Tensed-----	50	Somewhat limited Seepage Slope	0.70 0.32	Very limited Depth to saturated zone Dusty	1.00 0.04
Pedee-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
354: Tensed-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
Pedee-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.04
355: Southwick-----	55	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.97 0.50 0.19
Driscoll-----	30	Somewhat limited Slope Seepage	0.92 0.70	Very limited Depth to saturated zone Dusty	1.00 0.19
356: Southwick-----	55	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.97 0.50 0.19
Driscoll-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.19
360: Larkin-----	80	Somewhat limited Slope Seepage	0.92 0.70	Somewhat limited Dusty	0.19
361: Larkin-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.19
363: Larkin-----	55	Somewhat limited Seepage Slope	0.70 0.68	Somewhat limited Dusty	0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363: Driscoll-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.19
364: Larkin-----	50	Somewhat limited Slope Seepage	0.92 0.70	Somewhat limited Dusty	0.19
Southwick-----	35	Somewhat limited Seepage Slope	0.70 0.68	Somewhat limited Depth to saturated zone Piping Dusty	0.97 0.50 0.19
367: Larkin-----	55	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.19
Driscoll-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.19
400: Driscoll-----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.19
405: Thatuna-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.22
Naff-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
406: Thatuna-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.22
Naff-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
410: Palouse-----	50	Somewhat limited Seepage Slope	0.70 0.08	Somewhat limited Dusty	0.19

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
410: Naff-----	35	Somewhat limited Seepage Slope	0.70 0.32	Somewhat limited Dusty	0.19
411: Palouse-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.19
414: Naff-----	45	Somewhat limited Seepage Slope	0.70 0.32	Somewhat limited Dusty	0.22
Thatuna-----	40	Somewhat limited Seepage Slope	0.70 0.32	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.22
415: Naff-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
Tilma-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.22
416: Naff-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
Thatuna-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Depth to saturated zone Piping Dusty	0.93 0.50 0.22
417: Naff-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
Palouse-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
420: Garfield-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
Tilma-----	35	Somewhat limited Seepage Slope	0.70 0.68	Very limited Depth to saturated zone Dusty	1.00 0.22

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
421: Naff-----	55	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
Garfield-----	30	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.22
500: Hobo-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Threebear-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.02
501: Hobo, warm-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.01
Threebear, warm----	40	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.01
510: Honeyjones-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
Ahrs-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
600: Ardenvoir-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Seepage Dusty	0.22 0.05 0.01
Huckle-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.30 0.02 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
601: Ardenvoir-----	55	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
McCrosket-----	25	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.46 0.11 0.02
605: Benewah-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.03
Rasser-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.03
606: Benewah-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.03
Rasser-----	40	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.03
610: Schumacher-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.19	Somewhat limited Thin layer Dusty	0.23 0.14
611: Schumacher-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.19	Somewhat limited Thin layer Dusty	0.23 0.15
Tekoa-----	40	Very limited Slope Depth to bedrock Seepage	1.00 0.77 0.70	Somewhat limited Thin layer Dusty	0.77 0.15
612: Libertybutte-----	45	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Piping Dusty	1.00 0.50 0.17
Tekoa-----	40	Very limited Slope Depth to bedrock Seepage	1.00 0.77 0.70	Somewhat limited Thin layer Dusty	0.77 0.17

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
613: Ardenvoir, dry-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Large stones Dusty Thin layer	0.50 0.49 0.08 0.02 0.01
Lotuspoint-----	35	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.05
614: Ardenvoir, dry-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Large stones Dusty Thin layer	0.50 0.49 0.08 0.02 0.01
Lotuspoint-----	35	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.05
617: Tekoa-----	80	Very limited Slope Depth to bedrock Seepage	1.00 0.77 0.70	Somewhat limited Thin layer Dusty	0.77 0.15
621: Huckle-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
625: Huckle-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
Ardenvoir-----	40	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
650: Grangemont-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
651: Kingspeak-----	55	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
Shayhill, stony surface-----	30	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Dusty	0.18 0.02
652: Kingspeak-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
653: Kingspeak, cool----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
655: Tigley, moist-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
656: Kingspeak, dry-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
660: Threebear-----	80	Somewhat limited Seepage Slope	0.70 0.68	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.01
662: Threebear, warm----	80	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.01
663: Threebear, warm----	50	Somewhat limited Seepage Slope	0.70 0.08	Very limited Depth to saturated zone Piping Dusty	1.00 0.50 0.01
Porrett-----	35	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Dusty	1.00 0.01
665: Grangemont, warm----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
670: Honeyjones, warm----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
671: Honeyjones-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
680: Ardenvoir-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
Huckle-----	40	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
681: Huckle-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
Ahrs-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
700: Ardenvoir-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
Huckle-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
701: Ardenvoir-----	55	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
701: McCrosket-----	25	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.46 0.11 0.01
703: Ardenvoir, dry-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Large stones Dusty Thin layer	0.49 0.08 0.02 0.01
Ardenvoir-----	40	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Seepage Dusty	0.22 0.05 0.01
704: Ardenvoir, dry-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Large stones Dusty Thin layer	0.49 0.08 0.02 0.01
Ardenvoir-----	40	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Seepage Dusty	0.22 0.05 0.01
705: Ardenvoir-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.02
Rasser-----	30	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
706: Ardenvoir-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
707: Huckle, dry-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
Ardenvoir-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
710: McCrosket-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.46 0.11 0.01
Ardenvoir-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
711: McCrosket-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.46 0.11 0.01
Ardenvoir-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
712: McCrosket-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Thin layer Large stones Dusty	0.46 0.11 0.05
Tekoa-----	30	Very limited Slope Depth to bedrock Seepage	1.00 0.77 0.70	Somewhat limited Thin layer Dusty	0.77 0.12
716: Ahrs-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
720: Huckle-----	80	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
721: Huckle-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
Ardenvoir-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
735: Lotuspoint, stony surface-----	80	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.04
736: Lotuspoint, stony surface-----	65	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.03
Rock outcrop-----	15	Very limited Slope Depth to bedrock	1.00 1.00	Not rated	
756: Tigley-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
757: Hugus, warm-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.01
758: Tigley, moist-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
Hugus-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty	0.02
765: Saint Maries-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Seepage Piping Dusty	1.00 0.50 0.01
Huckle-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
770: Pinecreek-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Piping Dusty	0.57 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
771: Honeyjones, warm----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Dusty	0.38 0.01
772: Honeyjones, warm----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
Ahrs-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
773: Honeyjones, dry-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
774: Pinecreek, moist----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Piping Dusty	0.57 0.50 0.02
775: Pinecreek, moist----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Piping Dusty	0.57 0.50 0.02
776: Cassychill-----	80	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Seepage Thin layer Dusty	1.00 1.00 0.05
777: Bouldercreek, warm--	80	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage Piping Dusty	0.99 0.50 0.01
778: Cassychill-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Seepage Thin layer Dusty	1.00 1.00 0.05
Lotuspoint-----	35	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.05

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
779: Bouldercreek-----	80	Very limited Seepage Slope	1.00 1.00	Very limited Seepage Large stones Dusty	1.00 0.06 0.01
780: Ardenvoir-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Seepage Dusty	0.50 0.22 0.05 0.01
Huckle-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Large stones Dusty	0.50 0.30 0.02 0.01
Saint Maries, dry---	30	Very limited Slope Seepage	1.00 0.70	Very limited Seepage Large stones Piping Dusty	1.00 0.81 0.50 0.01
781: Ahhs, moist-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Large stones Dusty	0.50 0.43 0.04 0.01
Honeyjones, warm----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
782: Ardenvoir, dry-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Large stones Dusty Thin layer	0.50 0.49 0.08 0.02 0.01
Cassyhill-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Seepage Thin layer Dusty	1.00 1.00 0.05
784: Pinecreek, moist----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Piping Dusty	0.57 0.50 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
784: Lotuspoint-----	35	Very limited Slope Depth to bedrock Seepage	1.00 0.95 0.70	Very limited Large stones Thin layer Piping Seepage Dusty	1.00 0.98 0.50 0.15 0.04
791: Latour-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Large stones Piping Seepage	0.97 0.50 0.14
800: Rock outcrop-----	100	Very limited Slope Depth to bedrock	1.00 1.00	Not rated	
801: Pits, gravel-----	100	Not rated		Not rated	
802: Kingspeak-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Dusty	0.50 0.02
Urban land-----	35	Not rated		Not rated	
900: Water-----	100	Not rated		Not rated	
901: Aquandic Endoaquepts	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Dusty	1.00 1.00 0.02
Aquic Udifluvents---	40	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone Dusty	1.00 0.99 0.02
902: Ahrs-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
903: Ahrs-----	50	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
903: Pinecreek-----	30	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Piping Dusty	0.57 0.50 0.01
907: Honeyjones-----	80	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
908: Honeyjones-----	45	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty	0.50 0.38 0.01
Ahrs-----	35	Very limited Slope Seepage	1.00 0.70	Somewhat limited Piping Seepage Dusty Large stones	0.50 0.48 0.01 0.01
913: Hobo-----	85	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Ac1: Arson-----	40	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Dusty	0.50 0.19 0.04
Carlinton-----	35	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.02
Ac2: Arson, dry-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Dusty	0.50 0.19 0.05
Carlinton, dry-----	30	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.03
An4: Arson, dry-----	55	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.01	Somewhat limited Piping Thin layer Dusty	0.50 0.19 0.03
Minaloosa, dry-----	20	Very limited Slope Seepage	1.00 0.70	Somewhat limited Seepage Dusty	0.56 0.02

Soil Survey of Benewah County Area, Idaho, Western Part

Table 27.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes and levees	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Rs2: Reggear, moist-----	40	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone Dusty	1.00 0.03
Stewah-----	25	Very limited Slope Seepage	1.00 0.70	Somewhat limited Dusty Thin layer	0.03 0.01

Table 28.--Engineering Properties

(Absence of an entry indicates that data were not estimated. The asterisk '*' denotes the representative texture textures follow the dash.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
105: Aquic Udfluvents, protected-----	In				Pct	Pct				
	0-8	*Silt loam	*CL-ML, ML, CL	*A-4	0	0	85-100	85-100	75-97	
	8-22	*Gravelly silt loam, gravelly fine sandy loam	*GC-GM, GC, GM	*A-4, A-2	0	0-20	45-65	45-65	40-65	
	22-60	*Extremely cobbly loamy coarse sand, extremely gravelly loamy sand	*GP-GM, GP-GC	*A-1	0	24-63	20-40	15-40	10-25	
Typic Fluvaquents, protected-----	0-9	*Silt loam	*CL-ML, ML	*A-4	0	0	90-100	90-100	75-95	
	9-27	*Silt loam, very fine sandy loam, sandy loam	*CL-ML, ML	*A-4	0	0	85-100	85-100	70-95	
	27-60	*Extremely cobbly fine sandy loam, very cobbly silt loam, extremely gravelly loamy sand	*GM, GP-GM, GC-GM	*A-1, A-4	0	20-54	20-65	15-65	10-60	
116: Thatuna-----	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	98-10	
	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
116: Caldwell-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>				
	0-4	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	4-10	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	10-16	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	16-21	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	21-30	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	30-40	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	40-52	*Silt loam, silty clay loam	*CL	*A-6, A-4, A-7	0	0	100	100	98-10	
	52-60	*Silt loam, silty clay loam	*CL	*A-6, A-7, A-4	0	0	100	100	98-10	
118: Thatuna-----	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	98-10	
	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10	
Cald-----	0-7	*Silt loam	*ML, CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	7-13	*Silt loam	*ML, CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	13-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	17-25	*Stratified silt loam to very fine sandy loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	25-40	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	40-48	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	48-60	*Silty clay loam, silt loam	*CL	*A-6, A-7, A-4	0	0	100	100	98-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
120: Latahco-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-13	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	13-20	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	85-100
	20-26	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	90-100
	26-42	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	90-100
	42-51	*Silt loam, silty clay loam	*CL	*A-6, A-7	0	0	100	100	90-100
	51-62	*Silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-100
121: Latahco-----	0-13	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	13-20	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	85-100
	20-26	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	90-100
	26-42	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	90-100
	42-51	*Silt loam, silty clay loam	*CL	*A-6, A-7	0	0	100	100	90-100
	51-62	*Silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-100
Lovell-----	0-8	*Ashy silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	8-18	*Ashy silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-100
	18-22	*Silt loam	*CL	*A-6, A-4	0	0	100	100	95-100
	22-34	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	95-100
	34-51	*Loam, silty clay loam, silt loam	*CL	*A-6, A-4	0	0	100	100	95-100
	51-60	*Loam, silt loam	*CL	*A-6, A-4	0	0	100	100	95-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
122: Tilma-----	In				Pct	Pct				
	0-8	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	
	8-14	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	
	14-20	*Silt loam	*CL	*A-4	0	0	100	100	100	
	20-23	*Silt loam	*CL, CL-ML	*A-4	0	0	100	100	100	
	23-30	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	
	30-34	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	
	34-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	
	42-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	
Latah-----	0-10	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	98-10	
	10-14	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	98-10	
	14-19	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	98-10	
	19-22	*Silt loam, silt	*CL-ML, ML	*A-4	0	0	100	100	98-10	
	22-31	*Silty clay loam, silty clay	*CL, CH	*A-7, A-6	0	0	100	100	98-10	
	31-38	*Silty clay loam, silty clay	*CL, CH	*A-7	0	0	100	100	98-10	
	38-60	*Silty clay loam, silty clay	*CL, CH	*A-7, A-6	0	0	100	100	98-10	
124: Caldwell-----	0-4	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	4-10	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	10-16	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	98-10	
	16-21	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	21-30	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	30-40	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	40-52	*Silt loam, silty clay loam	*CL	*A-6, A-4, A-7	0	0	100	100	98-10	
	52-60	*Silt loam, silty clay loam	*CL	*A-6, A-7, A-4	0	0	100	100	98-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
124: Cald-----	In					Pct	Pct				
	0-7	*Silt loam	*ML, CL, CL-ML	*A-4, A-6		0	0	100	100	98-10	
	7-13	*Silt loam	*ML, CL, CL-ML	*A-4, A-6		0	0	100	100	98-10	
	13-17	*Silt loam	*CL, CL-ML	*A-6, A-4		0	0	100	100	98-10	
	17-25	*Stratified silt loam to very fine sandy loam	*CL, ML	*A-6, A-4		0	0	100	100	98-10	
	25-40	*Silt loam, silty clay loam	*CL	*A-6, A-4		0	0	100	100	98-10	
	40-48	*Silt loam, silty clay loam	*CL	*A-6, A-4		0	0	100	100	98-10	
125: Lovell-----	48-60	*Silty clay loam, silt loam	*CL	*A-6, A-7, A-4		0	0	100	100	98-10	
	0-8	*Ashy silt loam	*ML, CL-ML, CL	*A-4, A-6		0	0	100	100	90-10	
	8-18	*Ashy silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10	
	18-22	*Silt loam	*CL	*A-6, A-4		0	0	100	100	95-10	
	22-34	*Silt loam, silty clay loam	*CL	*A-6, A-4		0	0	100	100	95-10	
	34-51	*Loam, silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	95-10	
	51-60	*Loam, silt loam	*CL	*A-6, A-4		0	0	100	100	95-10	
Porrett-----	0-3	*Ashy silt loam	*ML, CL, CL-ML	*A-4, A-6		0	0	100	100	95-10	
	3-14	*Ashy silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10	
	14-21	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10	
	21-60	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	90-10	
Aquandic Endoaquepts----	0-11	*Ashy silt loam	*CL-ML, ML, CL	*A-4		0	0	85-100	85-100	70-95	
	11-40	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4		0	0	85-100	85-100	75-96	
	40-60	*Extremely gravelly loam, very cobbly fine sandy loam	*GC-GM, GP-GM	*A-1		0	6-31	15-35	15-30	10-30	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
130: Porrett-----	In				Pct	Pct				
	0-3	*Ashy silt loam		*A-4, A-6		0	0	100	100	95-10
	3-14	*Ashy silt loam								
	14-21	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
	21-60	*Silty clay loam, silt loam	*CL, CL-ML *CL	*A-4, A-6 *A-6, A-7		0	0	100	100	95-10 90-10
136: Lovell-----										
	0-8	*Ashy silt loam	*ML, CL-ML, CL	*A-4, A-6		0	0	100	100	90-10
	8-18	*Ashy silt loam								
	18-22	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
	22-34	*Silt loam, silty clay loam	*CL	*A-6, A-4 *A-6, A-4		0	0	100	100	95-10 95-10
Porrett-----	34-51	*Loam, silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	95-10
	51-60	*Loam, silt loam	*CL	*A-6, A-4		0	0	100	100	95-10
	0-3	*Ashy silt loam	*ML, CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
	3-14	*Ashy silt loam								
	14-21	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
141: Miesen-----	21-60	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	90-10
	0-12	*Ashy silt loam	*ML	*A-4		0	0	100	100	95-10
	12-32	*Silt loam, very fine sandy loam	*CL, ML	*A-4		0	0	100	100	95-10
	32-60	*Silt loam, very fine sandy loam, fine sandy loam	*CL-ML, CL, ML	*A-4		0	0	100	100	95-10
142: Miesen-----										
	0-12	*Ashy silt loam	*ML	*A-4		0	0	100	100	95-10
	12-32	*Silt loam, very fine sandy loam	*CL, ML	*A-4		0	0	100	100	95-10
	32-60	*Silt loam, very fine sandy loam, fine sandy loam	*CL-ML, CL, ML	*A-4		0	0	100	100	95-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
142: Ramsdell-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>				
	0-8	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10	
	8-35	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10	
	35-60	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10	
143: Miesen, protected, drained-----										
	0-12	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10	
	12-32	*Silt loam, very fine sandy loam	*CL, ML	*A-4	0	0	100	100	95-10	
	32-60	*Silt loam, very fine sandy loam, fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10	
144: Miesen, protected, drained-----										
	0-12	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10	
	12-32	*Silt loam, very fine sandy loam	*CL, ML	*A-4	0	0	100	100	95-10	
	32-60	*Silt loam, very fine sandy loam, fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10	
Ramsdell, protected, drained-----										
	0-8	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10	
	8-35	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10	
	35-60	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
145: Bellslake, protected, drained-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-5	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-10
	5-11	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-10
	11-23	*Silt loam	*ML, CL	*A-4	0	0	100	100	90-10
	23-32	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-10
	32-40	*Silt loam	*ML	*A-4	0	0	100	100	90-10
150: Pywell, protected, drained-----	40-47	*Stratified muck to silt loam	*PT	*A-8	0	0	100	100	90-10
	47-55	*Muck	*PT	*A-8	0	0	100	100	85-10
	55-62	*Muck	*PT	*A-8	0	0	100	100	85-10
	0-16	*Muck	*PT	*A-8	0	0	100	100	85-10
	16-65	*Muck	*PT	*A-8	0	0	100	100	85-10
155: Ramsdell-----									
	0-8	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10
	8-35	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	35-60	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10
156: Ramsdell, protected, drained-----									
	0-8	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10
	8-35	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	35-60	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10
157: Ramsdell, protected, drained-----									
	0-8	*Ashy silt loam	*ML	*A-4	0	0	100	100	95-10
	8-35	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	35-60	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	100	100	95-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
157: DeVoignes, protected, drained-----	In				Pct	Pct					
	0-9	*Mucky silt loam	*OL, CL-ML	*A-4	0	0	100	100	96-10		
	9-24	*Stratified muck to silt loam, stratified muck to silty clay loam	*PT	*A-8	0	0	100	100	95-10		
	24-60	*Silty clay loam, stratified silty clay loam to silt loam	*CL, CH	*A-6, A-7	0	0	100	100	95-10		
158: DeVoignes-----	0-9	*Mucky silt loam	*OL, CL-ML	*A-4	0	0	100	100	96-10		
	9-24	*Stratified muck to silt loam, stratified muck to silty clay loam	*PT	*A-8	0	0	100	100	95-10		
	24-60	*Silty clay loam, stratified silty clay loam to silt loam	*CL, CH	*A-6, A-7	0	0	100	100	95-10		
Pywell-----	0-16	*Muck	*PT	*A-8	0	0	100	100	85-10		
	16-65	*Muck	*PT	*A-8	0	0	100	100	85-10		
200: Blinn, stony surface-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10		
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10		
	2-6	*Ashy silt loam, stony ashy loam, gravelly ashy silt loam	*CL-ML, CL, ML	*A-4	0-10	0-10	80-90	80-90	70-85		
	6-12	*Gravelly ashy silt loam, cobbly silt loam	*CL-ML, GM, CL	*A-4	0-8	0-16	60-75	60-75	55-75		
	12-24	*Stony loam, very cobbly loam	*CL, GC-GM	*A-4	8-19	8-19	70-90	65-85	60-80		
	24-39	*Very stony loam, extremely stony loam, very cobbly loam	*SC-SM, CL, GC-GM	*A-4, A-2	22-46	7-28	55-85	55-85	45-80		
39-40	*Bedrock	---	---	---	---	---	---	---			

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
201: Blinn, stony surface-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-6	*Ashy silt loam, stony ashy loam, gravelly ashy silt loam	*CL-ML, CL, ML	*A-4	0-10	0-10	80-90	80-90	70-85
	6-12	*Gravelly ashly silt loam, cobbly silt loam	*CL-ML, GM, CL	*A-4	0-8	0-16	60-75	60-75	55-75
	12-24	*Stony loam, very cobbly loam	*CL, GC-GM	*A-4	8-19	8-19	70-90	65-85	60-80
	24-39	*Very stony loam, extremely stony loam, very cobbly loam	*SC-SM, CL, GC-GM	*A-4, A-2	22-46	7-28	55-85	55-85	45-80
	39-40	*Bedrock	---	---	---	---	---	---	---
202: Blinn, stony surface-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-6	*Ashy silt loam, stony ashy loam, gravelly ashy silt loam	*CL-ML, CL, ML	*A-4	0-10	0-10	80-90	80-90	70-85
	6-12	*Gravelly ashly silt loam, cobbly silt loam	*CL-ML, GM, CL	*A-4	0-8	0-16	60-75	60-75	55-75
	12-24	*Stony loam, very cobbly loam	*CL, GC-GM	*A-4	8-19	8-19	70-90	65-85	60-80
	24-39	*Very stony loam, extremely stony loam, very cobbly loam	*SC-SM, GC-GM, CL	*A-4, A-2	22-46	7-28	55-85	55-85	45-80
	39-40	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
202: Bobbitt, stony surface-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-9	*Stony ashy silt loam	*CL-ML, GC-GM, CL	*A-4	9-15	7-15	65-90	60-90	55-85
	9-23	*Very stony clay loam, very stony loam, extremely stony loam	*CL, GC	*A-6, A-2	20-45	13-34	50-80	45-80	40-75
	23-33	*Bedrock	---	---	---	---	---	---	---
210: Agatha, stony surface-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-7	*Ashy silt loam	*ML	*A-4	0	0-9	80-100	80-100	75-99
	7-11	*Gravelly ashy silt loam, ashy silt loam	*ML, GM	*A-4	0	0-16	55-70	55-70	50-70
	11-20	*Very gravelly silt loam, very cobbly loam	*GC, GC-GM	*A-4, A-2	0-12	7-38	40-55	40-55	35-55
	20-32	*Very gravelly loam, very cobbly loam	*GC, GC-GM	*A-4, A-2	0-12	7-38	40-55	40-55	35-50
	32-38	*Very cobbly loam, extremely cobbly clay loam	*CL, GC-GM	*A-4, A-6, A-2	0-17	42-52	45-90	45-90	40-85
	38-43	*Extremely cobbly clay loam, very cobbly loam	*CL, GC-GM	*A-4, A-6, A-1	0-16	46-64	30-75	30-75	25-70
	43-53	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
212: Agatha, stony surface-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	2-7	*Gravelly ashly silt loam	*ML, GM	*A-4	0	0-8		55-70	55-70	50-70
	7-11	*Gravelly ashly silt loam	*ML, GM	*A-4	0	0-16		55-70	55-70	50-70
	11-20	*Very gravelly silt loam, very cobbly loam	*GC, GC-GM	*A-4, A-2	0-12	7-38		40-55	40-55	35-55
	20-32	*Very gravelly loam, very cobbly loam	*GC, GC-GM	*A-4, A-2	0-12	7-38		40-55	40-55	35-50
	32-38	*Very cobbly loam, extremely cobbly clay loam	*CL, GC-GM	*A-4, A-6, A-2	0-17	42-52		45-90	45-90	40-85
	38-43	*Extremely cobbly clay loam, very cobbly loam	*CL, GC-GM	*A-4, A-6, A-1	0-16	46-64		30-75	30-75	25-70
	43-53	*Bedrock	---	---	---	---		---	---	---
230: Lacy, stony surface-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0		100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0		100	100	60-10
	2-3	*Stony silt loam	*CL-ML, CL	*A-4	8-15	8-15		65-80	65-80	60-75
	3-10	*Stony silt loam	*CL-ML, CL	*A-4	8-22	8-15		65-80	65-80	60-75
	10-14	*Very stony silt loam, very cobbly silt loam	*CL, GC	*A-6, A-4	34-55	6-23		60-90	55-90	50-85
	14-17	*Extremely stony loam, extremely stony clay loam	*GC, CL	*A-6, A-2	55-80	5-32		40-85	35-80	35-80
	17-27	*Bedrock	---	---	---	---		---	---	---
	0-60	*Bedrock	---	---	---	---		---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
231: Lacy, very stony surface--	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Stony loam	*CL-ML, CL, GC-GM	*A-4	8-15	7-15	65-80	65-80	55-75	
	2-4	*Stony loam	*CL-ML, CL GC-GM, CL	*A-4	8-15	7-15	65-80	65-80	55-75	
	4-8	*Very stony loam	*GC, GC-GM, CL	*A-4	14-37	7-12	65-80	65-80	55-75	
	8-16	*Very stony loam, extremely stony clay loam	*CL, GC	*A-6, A-4	34-58	6-23	60-90	55-90	50-85	
	16-19	*Extremely stony clay loam, extremely stony loam	*CL, GC	*A-6, A-2	50-76	5-32	40-85	35-80	35-75	
	19-29	*Bedrock	---	---	---	---	---	---	---	
Rock outcrop---- 232: Lacy, stony surface-----	0-60	*Bedrock	---	---	---	---	---	---	---	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Stony silt loam	*CL-ML, CL	*A-4	8-15	8-15	65-80	65-80	60-75	
	3-10	*Stony silt loam	*CL-ML, CL	*A-4	8-22	8-15	65-80	65-80	60-75	
	10-14	*Very stony silt loam, very cobbly silt loam	*CL, GC	*A-6, A-4	34-55	6-23	60-90	55-90	50-85	
	14-17	*Extremely stony loam, extremely stony clay loam	*GC, CL	*A-6, A-2	55-80	5-32	40-85	35-80	35-80	
	17-27	*Bedrock	---	---	---	---	---	---	---	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
					Unified	AASHTO	inches	>10	3-10	inches
232: Bobbitt, stony surface-----	In						Pct	Pct		
	0-1	*Slightly decomposed plant material	*PT			*A-8	0	0	100	100
	1-2	*Moderately decomposed plant material	*PT			*A-8	0	0	100	100
	2-9	*Stony ashy silt loam	*CL-ML, GC-GM, CL			*A-4	9-15	7-15	65-90	60-90
	9-23	*Very stony clay loam, very stony loam, extremely stony loam	*CL, GC			*A-6, A-2	20-45	13-34	50-80	45-80
	23-33	*Bedrock	---			---	---	---	---	---
233: Lacy, very stony surface--	0-1	*Slightly decomposed plant material	*PT			*A-8	0	0	100	100
	1-2	*Stony loam	*CL-ML, GC-GM, CL			*A-4	8-15	7-15	65-80	65-80
	2-4	*Stony loam	*CL-ML, GC-GM, CL			*A-4	8-15	7-15	65-80	65-80
	4-8	*Very stony loam	*GC, GC-GM, CL			*A-4	14-37	7-12	65-80	65-80
	8-16	*Very stony loam, extremely stony clay loam	*CL, GC			*A-6, A-4	34-58	6-23	60-90	55-90
	16-19	*Extremely stony clay loam, extremely stony loam	*CL, GC			*A-6, A-2	50-76	5-32	40-85	35-80
	19-29	*Bedrock	---			---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT			*A-8	0	0	100	100
	1-2	*Moderately decomposed plant material	*PT			*A-8	0	0	100	100
	2-4	*Stony ashy loam	*CL-ML, GC-GM, CL			*A-4	9-16	8-15	70-90	70-90
Bobbitt, very stony surface--	4-11	*Stony ashy loam	*CL-ML, GC-GM, CL			*A-4	8-15	8-15	65-90	60-90
	11-15	*Very cobbly loam	*CL, GC			*A-6, A-4	18-24	14-37	65-80	65-80
	15-27	*Very cobbly loam, very stony clay loam	*CL, GC			*A-6, A-4	18-24	14-37	65-80	65-80
	27-33	*Extremely stony loam, very stony clay loam	*GC, CL			*A-6, A-2	21-36	14-33	45-80	40-75
	33-43	*Bedrock	---			---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
250: Dorb, warm, stony surface--	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Cobbly ashly silt loam	*ML, MH, GM	*A-4, A-5	0-10	14-43	55-85	50-85	45-80	
	3-20	*Very cobbly ashly loam, cobbly ashly silt loam	*GM	*A-4, A-1	0-21	30-63	25-60	20-55	15-55	
	20-32	*Very cobbly loam, extremely stony silt loam	*GC-GM, GC, GM	*A-2, A-4, A-1	0-28	22-45	25-65	25-60	20-60	
	32-48	*Extremely cobbly loam, extremely stony silt loam	*GC, GP-GM	*A-2, A-1	0-32	27-64	15-50	15-50	10-45	
	48-58	*Bedrock	---	---	---	---	---	---	---	
255: Shayhill, stony surface-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	2-3	*Ashy silt loam	*ML	*A-4	0	0	80-90	80-90	70-85	
	3-10	*Ashy silt loam	*ML	*A-4	0	0-9	80-90	80-90	70-85	
	10-19	*Cobbly silt loam, gravelly silt loam	*CL-ML, CL	*A-4	0-7	8-30	80-90	80-90	65-85	
	19-28	*Very stony silt loam, very cobbly silt loam	*CL-ML, CL	*A-4	0-38	8-31	70-90	70-85	60-80	
	28-48	*Extremely cobbly loam, extremely stony clay loam, very cobbly silt loam	*GC, CL	*A-2, A-6	0-11	14-28	30-75	25-75	20-70	
	48-55	*Extremely stony loam, very cobbly loam, extremely cobbly loam	*GC, CL, GC-GM	*A-2, A-6, A-1	0-33	15-39	45-80	40-75	35-70	
55-64	*Extremely cobbly loam, extremely stony loam, very cobbly loam	*GC, GC-GM	*A-2, A-4, A-1	0-33	15-39	40-70	35-70	30-60		

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	inches	>10	3-10	4	10	40
256: Shayhill, stony surface-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>				
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	2-3	*Gravelly ashly silt loam	*ML	*A-4		0-8	0-8	60-70	60-70	55-65
	3-10	*Gravelly ashly silt loam	*ML, GM	*A-4		0-8	0-8	55-75	50-70	45-70
	10-19	*Cobbly silt loam, gravelly silt loam	*CL-ML, CL	*A-4		0-7	8-30	80-90	80-90	65-85
	19-28	*Very stony silt loam, very cobbly silt loam	*CL-ML, CL	*A-4		0-38	8-31	70-90	70-85	60-80
	28-48	*Extremely cobbly loam, extremely stony clay loam, very cobbly silt loam	*GC	*A-2, A-6		0-22	15-28	30-70	25-65	20-60
	48-55	*Extremely stony loam, very cobbly loam, extremely cobbly loam	*GC, CL, GC-GM	*A-2, A-6, A-1		0-33	15-39	45-80	40-75	35-70
	55-64	*Extremely cobbly loam, extremely stony loam, very cobbly loam	*GC, GC-GM	*A-2, A-4, A-1		0-33	15-39	40-70	35-70	30-60
257: Shayhill, dry, stony surface--	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	2-4	*Gravelly ashly silt loam	*ML	*A-4		0-8	0-8	60-70	60-70	55-65
	4-11	*Cobbly ashly silt loam, gravelly ashly silt loam	*ML	*A-4		0-8	0-24	70-85	70-80	60-80
	11-19	*Cobbly silt loam, gravelly silt loam	*CL-ML, CL	*A-4		0-7	8-29	65-85	65-85	55-80
	19-64	*Very cobbly loam, extremely stony clay loam, very cobbly silt loam	*GC, CL	*A-6, A-2		0-22	15-44	45-75	40-75	35-70

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
260: Seddw-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	6-10	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	10-16	*Silt loam, gravelly silt loam	*CL	*A-6, A-4	0	0-9	85-100	80-100	75-10
	16-24	*Silt loam, gravelly silty clay loam	*CL	*A-6	0	0-9	80-100	80-100	75-10
	24-32	*Cobbly clay loam, very cobbly clay loam	*CL, GC	*A-6, A-2	0	0-30	50-85	45-80	40-75
	32-45	*Very cobbly clay loam, very cobbly loam	*CL, GC	*A-6	0	10-50	60-75	55-70	50-65
	45-55	*Bedrock	---	---	---	---	---	---	---
261: sly, dry-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-5	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-10
	5-9	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-10
	9-29	*Silt loam, loam, silty clay loam	*CL	*A-6, A-4	0	0-8	75-100	75-100	70-10
	29-60	*Gravelly silt loam, silty clay loam, gravelly clay loam	*CL	*A-6, A-4, A-7	0	0-14	75-100	75-100	70-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
261: Shayhill, dry----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-3	*Ashy silt loam	*ML	*A-4	0-2	0-4	80-90	80-90	70-85
	3-11	*Ashy silt loam	*ML	*A-4	0-3	0-17	80-90	80-90	70-85
	11-19	*Gravelly silt loam, cobbly silt loam	*CL, GC-GM	*A-4	0	0-21	60-80	55-80	50-75
	19-42	*Extremely cobbly silt loam, extremely stony clay loam, very cobbly loam	*GC, CL	*A-6, A-2	0-22	28-44	45-75	40-70	35-70
262: Seddow-----	42-55	*Extremely cobbly loam, extremely stony loam, very cobbly loam	*GC, CL, GC-GM	*A-2, A-1, A-6	0-33	28-55	45-75	40-75	35-65
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	6-10	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	10-16	*Silt loam, gravelly silt loam	*CL	*A-6, A-4	0	0-9	85-100	80-100	75-10
	16-24	*Silt loam, gravelly silty clay loam	*CL	*A-6	0	0-9	80-100	80-100	75-10
	24-32	*Cobbly clay loam, very cobbly clay loam	*CL, GC	*A-6, A-2	0	0-30	50-85	45-80	40-75
	32-45	*Very cobbly clay loam, very cobbly loam	*CL, GC	*A-6	0	10-50	60-75	55-70	50-65
	45-55	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
262: Sly, dry-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-5	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-10
	5-9	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-10
	9-29	*Silt loam, loam, silty clay loam	*CL	*A-6, A-4	0	0-8	75-100	75-100	70-10
	29-60	*Gravelly silt loam, silty clay loam, gravelly clay loam	*CL	*A-6, A-4, A-7	0	0-14	75-100	75-100	70-10
300: Taney-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-4	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-10
	4-15	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-10
	15-22	*Silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	90-10
	22-29	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-10
	29-31	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	31-53	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
301: Taney-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	2-4	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-100
	4-15	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-100
	15-22	*Silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	90-100
	22-29	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	29-31	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	31-53	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95
303: Carlinton-----	0-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	5-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-100
	10-14	*Silt loam, ashly silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	90-100
	14-20	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95
	20-23	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95
	23-30	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95
	30-53	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100
	0-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	95-100	90-100	90-100
	6-15	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0-10	95-100	90-100	90-100
Benewah-----	15-18	*Silt loam	*CL-ML, ML	*A-4	0	0-10	95-100	90-100	90-100
	18-23	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0-10	90-100	85-100	85-100
	23-34	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0-10	90-100	85-100	85-100
	34-60	*Silty clay loam, gravelly silty clay loam, silt loam	*CL	*A-6, A-7, A-4	0	0-10	80-100	75-100	70-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pas- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
304: Benewah-----	In				Pct	Pct					
	0-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	95-100	90-100	90-10	
	6-15	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0-10	95-100	90-100	90-10	
	15-18	*Silt loam	*CL-ML, ML	*A-4		0	0-10	95-100	90-100	90-10	
	18-23	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0-10	90-100	85-100	85-10	
	23-34	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0-10	90-100	85-100	85-10	
	34-60	*Silty clay loam, gravelly silty clay loam, silt loam	*CL	*A-6, A-7, A-4		0	0-10	80-100	75-100	70-10	
Santa-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
310: Santa-----	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10	
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	9-15	*Silt loam	*CL-ML, CL	*A-4		0	0	100	100	90-10	
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10	
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0	100	100	90-10	
	44-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	100	100	90-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
311: Santa-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	9-15	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-100
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-100
	44-60	*Silty clay loam, silt loam	*CL	*A-6	0	0	0	100	100	90-100
314: Sharptop-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-4	*Ashy silt loam	*ML	*A-4	0	0	0	95-100	90-100	85-95
	4-9	*Ashy silt loam	*ML	*A-4	0	0	0	90-100	85-100	80-95
	9-17	*Silt loam, gravelly silt loam	*CL-ML, CL	*A-4	0	0	0	80-100	75-100	75-90
	17-27	*Silt loam, gravelly silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	80-100	75-100	70-90
	27-42	*Silt loam, gravelly silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	0	75-100	70-100	65-90
	42-49	*Paragravelly silt loam, silty clay loam, silt loam	*CL	*A-6, A-4	0	0	0	70-100	65-100	60-95
	49-59	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
314: Santa-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	2-4	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	4-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	9-15	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-100
	15-34	*Silt loam, silt	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
315: Setters-----	34-44	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	100	100	90-100
	44-60	*Silty clay loam, silt loam	*CL	*A-6	0	0	100	100	90-100
	0-4	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	4-15	*Silt loam	*CL	*A-4, A-6	0	0	100	100	90-100
	15-19	*Silt loam	*CL	*A-4, A-6	0	0	100	100	90-100
	19-22	*Silt loam	*CL-ML, ML, CL	*A-4	0	0	95-100	95-100	90-100
	22-60	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	95-100	95-100	90-100
316: Setters-----	0-4	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	4-15	*Silt loam	*CL	*A-4, A-6	0	0	100	100	90-100
	15-19	*Silt loam	*CL	*A-4, A-6	0	0	100	100	90-100
	19-22	*Silt loam	*CL-ML, ML, CL	*A-4	0	0	95-100	95-100	90-100
	22-60	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	95-100	95-100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
316: Taney-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-4	*Ashy silt loam	*ML	*A-4	0	0	0	100	100	90-100
	4-15	*Ashy silt loam	*ML	*A-4	0	0	0	100	100	90-100
	15-22	*Silt loam	*CL, ML, CL-ML	*A-4	0	0	0	100	100	90-100
	22-29	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	29-31	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	31-53	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	0	95-100	90-100	85-95
320: Reggear-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	5-13	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	13-24	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	24-28	*Silt loam	*CL	*A-6	0	0	0	100	100	90-100
	28-60	*Silty clay loam, silt loam	*CL	*A-6	0	0	0	95-100	95-100	90-100
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	5-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
321: Reggear, moist--	9-14	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	0	100	100	90-100
	14-22	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	22-39	*Silt loam	*CL	*A-6	0	0	0	100	100	90-100
	39-60	*Silt loam, silty clay loam	*CL	*A-6	0	0	0	95-100	95-100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
322: Reggear, moist----	In				Pct	Pct			
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	5-9	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	9-14	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	14-22	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	22-39	*Silt loam	*CL	*A-6	0	0	100	100	90-100
	39-60	*Silt loam, silty clay loam	*CL	*A-6	0	0	95-100	95-100	90-100
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
Sly-----	2-5	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-100
	5-9	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	80-100	80-100	75-100
	9-29	*Silt loam, loam, silty clay loam	*CL	*A-6, A-4	0	0-8	75-100	75-100	70-100
	29-60	*Gravelly silt loam, silty clay loam, gravelly clay loam	*CL	*A-6, A-4, A-7	0	0-14	75-100	75-100	70-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
323: Bechtel-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	2-4	*Ashy silt loam	*ML	*A-4	0	0		85-100	80-100	70-90
	4-9	*Ashy silt loam	*ML	*A-4	0	0		85-100	80-100	70-85
	9-17	*Silt loam, loam, gravelly silt loam	*CL-ML, CL, SC-SM	*A-4	0	0		75-95	70-85	60-80
	17-26	*Silt loam, gravelly silt loam, gravelly loam	*CL, SC-SM	*A-4, A-6	0	0		75-95	70-85	60-80
	26-35	*Very gravelly loam, very gravelly silt loam, gravelly silt loam	*GC, GC-GM	*A-2, A-1, A-6	0	0		45-55	40-50	35-45
	35-56	*Extremely gravelly loam, extremely cobbly loam, very gravelly silt loam	*GP-GC, GC	*A-1, A-2	0	0-45		15-40	10-35	10-30
	56-66	*Bedrock	---	---	---	---		---	---	---
Reggear-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0		100	100	90-10
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0		100	100	90-10
	5-13	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0		100	100	90-10
	13-24	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0		100	100	90-10
	24-28	*Silt loam	*CL	*A-6	0	0		100	100	90-10
	28-60	*Silty clay loam, silt loam	*CL	*A-6	0	0		95-100	95-100	90-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
	<i>In</i>				<i>Pct</i>	<i>Pct</i>				
325: Reggear-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10
	5-13	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	90-10
	13-24	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	90-10
	24-28	*Silt loam	*CL	*A-6		0	0	100	100	90-10
	28-60	*Silty clay loam, silt loam	*CL	*A-6		0	0	95-100	95-100	90-10
Sharptop, basalt substratum-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	90-10
	2-4	*Ashy silt loam	*ML	*A-4		0	0	95-100	90-100	85-95
	4-9	*Ashy silt loam	*ML	*A-4		0	0	95-100	90-100	85-95
	9-12	*Silt loam	*CL-ML, CL, ML	*A-4		0	0	95-100	90-100	85-95
	12-19	*Silt loam	*CL-ML, CL	*A-4		0	0	90-100	85-100	80-90
	19-27	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6		0	0	85-100	80-100	75-85
	27-41	*Very paragravelly silt loam, gravelly silt loam	*SC-SM, SC, GC-GM	*A-2, A-4, A-1		0	0-15	50-80	45-75	35-55
	41-47	*Very paragravelly loam, very gravelly loam	*SC-SM, SC, GC-GM	*A-4, A-2		0	0-15	55-85	50-80	40-60
	47-57	*Bedrock	---	---		---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
326: Reggear-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	2-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	5-13	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	13-24	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-10
	24-28	*Silt loam	*CL	*A-6	0	0	100	100	90-10
	28-60	*Silty clay loam, silt loam	*CL	*A-6	0	0	95-100	95-100	90-10
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10
Seddow-----	2-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	6-10	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	85-100	80-100	75-10
	10-16	*Silt loam, gravelly silt loam	*CL	*A-6, A-4	0	0-9	85-100	80-100	75-10
	16-24	*Silt loam, gravelly silty clay loam	*CL	*A-6	0	0-9	80-100	80-100	75-10
	24-32	*Cobbly clay loam, very cobbly clay loam	*CL, GC	*A-6, A-2	0	0-30	50-85	45-80	40-75
	32-45	*Very cobbly clay loam, very cobbly loam	*CL, GC	*A-6	0	10-50	60-75	55-70	50-65
	45-55	*Bedrock	---	---	---	---	---	---	---
	0-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10
	5-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-10
	10-14	*Silt loam, ashly silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	90-10
330: Carlinton-----	14-20	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95
	20-23	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95
	23-30	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95
	30-53	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
330: Carlinton, dry--	In				Pct	Pct				
	0-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10	90-10
	5-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	10-14	*Silt loam, ashly silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	100	90-10
	14-20	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	20-23	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	23-30	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95	85-95
	30-53	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100	90-100
335: Carlinton, dry--	0-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10	90-10
	5-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	10-14	*Silt loam, ashly silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	100	90-10
	14-20	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	20-23	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	23-30	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95	85-95
	30-53	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100	90-100
336: Carlinton, dry--	0-5	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-10	90-10
	5-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	10-14	*Silt loam, ashly silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	100	90-10
	14-20	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	20-23	*Silt loam	*CL-ML, CL	*A-4	0	0	95-100	90-100	85-95	85-95
	23-30	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95	85-95
	30-53	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
336: Taney-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-100
	2-4	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-100
	4-15	*Ashy silt loam	*ML	*A-4	0	0	100	100	90-100
	15-22	*Silt loam	*CL, ML, CL-ML	*A-4	0	0	100	100	90-100
	22-29	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	29-31	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	90-100
	31-53	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	95-100	90-100	85-95
	53-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	95-100	90-100	85-95
340: Arson-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-5	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	95-100	90-100	90-100
	5-9	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	95-100	90-100	85-100
	9-15	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	95-100	90-100	80-90
	15-38	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	90-100	85-100	75-85
	38-43	*Extremely gravelly silt loam, gravelly silt loam, extremely gravelly loam	*GC, GC-GM	*A-2, A-1, A-6	0	0-15	45-60	35-55	30-50
	43-57	*Very gravelly silt loam, extremely gravelly silt loam, very gravelly loam	*GC, GC-GM	*A-2, A-1, A-6	0	0-15	35-55	30-50	25-45
	57-67	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
340: Lotuspoint-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	2-4	*Gravelly ash silt loam	*GM, MH	*A-2, A-5	0	0-10	50-70	45-65	40-60	
	4-10	*Stony ash silt loam, very cobbly ash silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	40-65	35-65	30-60	
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-55	25-50	20-45	
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-55	25-50	20-40	
26-36	*Bedrock	---	---	---	---	---	---	---		
341: Sinkler-----	0-0.5	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100	
	0.5-1	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-100	
	1-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	90-100	85-100	85-95	
	6-12	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	95-100	90-100	85-95	
	12-20	*Silt loam	*CL-ML, CL	*A-4	0	0	90-100	85-100	85-95	
	20-28	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	90-100	85-100	85-95	
	28-38	*Silt loam	*CL	*A-6, A-4	0	0	90-100	85-100	80-95	
	38-51	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	90-100	85-100	80-95	
	51-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	90-100	85-100	80-95	

Table 28.---Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
341: Arson-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-5	*Ashy silt loam		*CL-ML, ML	0	0	95-100	90-100	90-10	
	5-9	*Ashy silt loam		*CL-ML, ML	0	0	95-100	90-100	85-10	
	9-15	*Silt loam		*CL, CL-ML	0	0	95-100	90-100	80-90	
	15-38	*Silt loam		*CL, CL-ML	0	0	90-100	85-100	75-85	
	38-43	*Extremely gravelly silt loam, gravelly silt loam, extremely gravelly loam		*GC, GC-GM A-6	0	0-15	45-60	35-55	30-50	
	43-57	*Very gravelly silt loam, extremely gravelly silt loam, very gravelly loam		*GC, GC-GM A-6	0	0-15	35-55	30-50	25-45	
	57-67	*Bedrock		---	---	---	---	---	---	
342: Sinkler, dry----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	1-8	*Ashy silt loam		*CL-ML, ML, CL	0	0	90-100	85-100	85-95	
	8-14	*Silt loam		*CL, CL-ML	0	0	90-100	85-100	85-95	
	14-20	*Silt loam		*CL, CL-ML	0	0	90-100	85-100	85-95	
	20-33	*Silty clay loam, silt loam		*CL	0	0	90-100	85-100	85-95	
	33-44	*Silty clay loam, silt loam		*CL	0	0	90-100	85-100	80-95	
	44-62	*Silt loam, silty clay loam		*CL	0	0	90-100	85-100	80-95	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-			
			Unified	AASHTO	>10 inches	3-10 inches				
							4	10	40	
342: Arson, dry-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-10
	2-5	*Ashy silt loam		*CL-ML, ML	*A-4	0	0	95-100	90-100	90-10
	5-9	*Ashy silt loam		*CL-ML, ML	*A-4	0	0	95-100	90-100	85-10
	9-15	*Silt loam		*CL, CL-ML	*A-4, A-6	0	0	95-100	90-100	80-90
	15-38	*Silt loam		*CL, CL-ML	*A-6, A-4	0	0	90-100	85-100	75-85
	38-43	*Extremely gravelly silt loam, gravelly silt loam, extremely gravelly loam		*GC, GC-GM	*A-2, A-1, A-6	0	0-15	45-60	35-55	30-50
	43-57	*Very gravelly silt loam, extremely gravelly silt loam, gravelly silt loam, very gravelly loam		*GC, GC-GM	*A-2, A-1, A-6	0	0-15	35-55	30-50	25-45
	57-67	*Bedrock		---	---	---	---	---	---	---
350: Southwick-----	0-10	*Ashy silt loam	*ML	*A-4		0	0	100	100	95-10
	10-18	*Silt loam	*ML, CL-ML	*A-4		0	0	100	100	95-10
	18-28	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
	28-31	*Silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	95-10
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10
	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10
	54-70	*Silt loam, silty clay loam	*CL	*A-6, A-7		0	0	100	100	95-10
	0-10	*Ashy silt loam	*ML	*A-4		0	0	100	100	95-10
	10-18	*Silt loam	*ML, CL-ML	*A-4		0	0	100	100	95-10
	18-28	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
351: Southwick-----	28-31	*Silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	95-10
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10
	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10
	54-70	*Silt loam, silty clay loam	*CL	*A-6, A-7		0	0	100	100	95-10
	0-10	*Ashy silt loam	*ML	*A-4		0	0	100	100	95-10
	10-18	*Silt loam	*ML, CL-ML	*A-4		0	0	100	100	95-10
	18-28	*Silt loam	*CL, CL-ML	*A-4, A-6		0	0	100	100	95-10
	28-31	*Silt loam	*CL-ML, CL, ML	*A-4		0	0	100	100	95-10
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10
	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7		0	0	100	100	95-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
353: Tensed-----	In				Pct	Pct					
	0-7	*Ashy silt loam	*CL-ML, ML	*A-4		0	0	85-100	70-100	65-100	65-100
	7-12	*Silt loam, gravelly loam	*CL, CL-ML	*A-4, A-6		0	0	70-100	65-100	60-100	60-100
	12-22	*Gravelly silt loam, loam	*CL, CL-ML	*A-4, A-6		0	0	70-100	65-100	65-100	65-100
	22-24	*Gravelly loam, fine sandy loam	*CL-ML, SM, CL	*A-4		0	0	70-100	65-100	55-96	55-96
	24-58	*Gravelly clay loam, loam, very gravelly sandy clay loam	*SC, CH	*A-6, A-7, A-2		0	0-14	80-97	50-85	45-80	45-80
Pedee-----	58-61	*Very gravelly sandy clay loam, gravelly loam, extremely gravelly clay loam	*SC, GC	*A-2, A-7		0	0-17	60-70	25-55	20-55	20-55
	0-10	*Ashy silt loam	*ML	*A-4		0	0-9	70-100	70-100	60-95	60-95
	10-19	*Gravelly silt loam, gravelly loam, silt loam	*GC, CL, GC-GM	*A-4, A-6		0	0-7	60-90	60-90	50-90	50-90
	19-22	*Very gravelly silt loam, gravelly silt loam, silt loam	*GC-GM, CL, GM	*A-2, A-4		0	0-26	40-75	40-75	35-75	35-75
	22-31	*Very gravelly clay, extremely gravelly clay loam, very gravelly silty clay loam	*GC, GP-GC	*A-7, A-2		0	0-22	20-55	20-55	15-55	15-55
	31-60	*Extremely gravelly loam, gravelly clay loam, very gravelly sandy loam	*GC, CL	*A-2, A-6		0	0-23	25-65	25-65	20-65	20-65

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
354: Tensed-----	In					Pct	Pct				
	0-7	*Ashy silt loam	*CL-ML, ML	*A-4			0	0	85-100	70-100	65-100
	7-12	*Silt loam, gravelly loam	*CL, CL-ML	*A-4, A-6			0	0	70-100	65-100	60-100
	12-22	*Gravelly silt loam, loam	*CL, CL-ML	*A-4, A-6			0	0	70-100	65-100	65-100
	22-24	*Gravelly loam, fine sandy loam	*CL-ML, SM, CL	*A-4			0	0	70-100	65-100	55-96
	24-58	*Gravelly clay loam, loam, very gravelly sandy clay loam	*SC, CH	*A-6, A-7, A-2			0	0-14	80-97	50-85	45-80
Pedee-----	58-61	*Very gravelly sandy clay loam, gravelly loam, extremely gravelly clay loam	*SC, GC	*A-2, A-7			0	0-17	60-70	25-55	20-55
	0-10	*Ashy silt loam	*ML	*A-4			0	0-9	70-100	70-100	60-95
	10-19	*Gravelly silt loam, gravelly loam, silt loam	*GC, CL, GC-GM	*A-4, A-6			0	0-7	60-90	60-90	50-90
	19-22	*Very gravelly silt loam, gravelly silt loam, silt loam	*GC-GM, CL, GM	*A-2, A-4			0	0-26	40-75	40-75	35-75
	22-31	*Very gravelly clay, extremely gravelly clay loam, very gravelly silty clay loam	*GC, GP-GC	*A-7, A-2			0	0-22	20-55	20-55	15-55
	31-60	*Extremely gravelly loam, gravelly clay loam, very gravelly sandy loam	*GC, CL	*A-2, A-6			0	0-23	25-65	25-65	20-65
355: Southwick-----	0-10	*Ashy silt loam	*ML	*A-4			0	0	100	100	95-100
	10-18	*Silt loam	*ML, CL-ML	*A-4			0	0	100	100	95-100
	18-28	*Silt loam	*CL, CL-ML	*A-4, A-6			0	0	100	100	95-100
	28-31	*Silt loam	*CL-ML, CL, ML	*A-4			0	0	100	100	95-100
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7			0	0	100	100	95-100
	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7			0	0	100	100	95-100
	54-70	*Silt loam, silty clay loam	*CL	*A-6, A-7			0	0	100	100	95-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	10	40
355: Driscoll-----	In				Pct	Pct				
	0-5	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	5-10	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	10-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	90-10
	17-24	*Silt loam	*CL-ML, CL	*A-4, A-6	0	0	100	100	100	90-10
	24-26	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	100	90-10
	26-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	95-10
	42-49	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	95-10
	49-60	*Silty clay loam, silty clay	*CL, CH	*A-6, A-7	0	0	95-100	90-100	90-100	90-10
356: Southwick-----	0-10	*Ashy silt loam	*ML	*A-4	0	0	100	100	100	95-10
	10-18	*Silt loam	*ML, CL-ML	*A-4	0	0	100	100	100	95-10
	18-28	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	100	95-10
	28-31	*Silt loam	*CL-ML, CL, ML	*A-4	0	0	100	100	100	95-10
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10
	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10
	54-70	*Silt loam, silty clay loam	*CL	*A-6, A-7	0	0	100	100	100	95-10
	0-5	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
	5-10	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	90-10
Driscoll-----	10-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	90-10
	17-24	*Silt loam	*CL-ML, CL	*A-4, A-6	0	0	100	100	100	90-10
	24-26	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	100	90-10
	26-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	95-10
	42-49	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	95-10
	49-60	*Silty clay loam, silty clay	*CL, CH	*A-6, A-7	0	0	95-100	90-100	90-100	90-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
360: Larkin-----	In						Pct			
	0-6	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	0	100	100	90-100
	6-14	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	14-22	*Silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-100
	22-39	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	0	95-100	90-100	90-100
361: Larkin-----	39-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	0	100	100	95-100
	0-6	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	0	100	100	90-100
	6-14	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	14-22	*Silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-100
	22-39	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	0	95-100	90-100	90-100
363: Larkin-----	39-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	0	100	100	95-100
	0-6	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	0	100	100	90-100
	6-14	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	0	100	100	90-100
	14-22	*Silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-100
	22-39	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	0	95-100	90-100	90-100
Driscoll-----	39-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	0	100	100	95-100
	0-5	*Silt loam	*CL-ML, ML	*A-4	0	0	0	100	100	90-100
	5-10	*Silt loam	*CL-ML, ML	*A-4	0	0	0	100	100	90-100
	10-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	0	100	100	90-100
	17-24	*Silt loam	*CL-ML, CL	*A-4, A-6	0	0	0	100	100	90-100
	24-26	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-100
	26-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	0	100	100	95-100
	42-49	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	0	100	100	95-100
	49-60	*Silty clay loam, silty clay	*CL, CH	*A-6, A-7	0	0	0	95-100	90-100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
364: Larkin-----	In				Pct	Pct			
	0-6	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	6-14	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	14-22	*Silt loam	*CL	*A-6, A-4	0	0	100	100	90-100
	22-39	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100
	39-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-100
Southwick-----	0-10	*Ashy silt loam							
	10-18	*Silt loam	*ML	*A-4	0	0	100	100	95-100
	18-28	*Silt loam	*ML, CL-ML	*A-4	0	0	100	100	95-100
	28-31	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-100
			*CL-ML, CL, ML	*A-4	0	0	100	100	95-100
	31-49	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-100
367: Larkin-----	49-54	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-100
	54-70	*Silt loam, silty clay loam	*CL	*A-6, A-7	0	0	100	100	95-100
	0-6	*Silt loam	*ML, CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	6-14	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	90-100
	14-22	*Silt loam	*CL	*A-6, A-4	0	0	100	100	90-100
Driscoll-----	22-39	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	95-100	90-100	90-100
	39-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-100
	0-5	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-100
	5-10	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-100
	10-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	90-100
	17-24	*Silt loam	*CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	24-26	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-100
	26-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	95-100
	42-49	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	95-100
	49-60	*Silty clay loam, silty clay	*CL, CH	*A-6, A-7	0	0	95-100	90-100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
400: Driscoll-----	In				Pct	Pct			
	0-5	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-100
	5-10	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	90-100
	10-17	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	90-100
	17-24	*Silt loam	*CL-ML, CL	*A-4, A-6	0	0	100	100	90-100
	24-26	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-100
	26-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	95-100
	42-49	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	95-100
	49-60	*Silty clay loam, silty clay	*CL, CH	*A-6, A-7	0	0	95-100	90-100	90-100
405: Thatuna-----	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-100
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-100
	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-100
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-100
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	98-100
	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-100
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-100
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-100
Naff-----	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-100
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-100
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-100
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	95-100
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
406: Thatuna-----	In				Pct	Pct				
	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	98-10
	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
Naff-----	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	100	95-10
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10
410: Palouse-----	0-11	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	95-10
	11-18	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	95-10
	18-26	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	95-10
	26-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	95-10
Naff-----	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	100	95-10
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pas- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
411: Palouse-----	In				Pct	Pct					
	0-11	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10		
	11-18	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10		
	18-26	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10		
	26-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	95-10		
414: Naff-----	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10		
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-10		
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	95-10		
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-10		
Thatuna-----	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	98-10		
415: Naff-----	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10		
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10		
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	98-10		
	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10		
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10		
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-10		
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	95-10		
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-10		

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
415: Tilma-----	In				Pct	Pct				
	0-8	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	100
	8-14	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	100
	14-20	*Silt loam	*CL	*A-4	0	0	100	100	100	100
	20-23	*Silt loam	*CL, CL-ML	*A-4	0	0	100	100	100	100
	23-30	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	100
	30-34	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	100
	34-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	100
416: Naff-----	42-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	100
	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	100	95-10
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10
	0-6	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	6-12	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
Thatuna-----	12-19	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	19-28	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	28-35	*Silt loam	*CL-ML, ML	*A-4	0	0	100	100	100	98-10
	35-43	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
	43-52	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
	52-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	98-10
	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	100	98-10
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
417: Naff-----	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	98-10
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	100	95-10
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	100	95-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
417: Palouse-----	In				Pct	Pct				
	0-11	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10	
	11-18	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10	
	18-26	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	95-10	
	26-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	95-10	
420: Garfield-----	0-7	*Silty clay loam	*CL, CH	*A-6, A-7	0	0	100	100	98-10	
	7-19	*Silty clay loam, silty clay	*CL, CH	*A-7	0	0	100	100	98-10	
	19-32	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	98-10	
	32-45	*Silty clay loam, silt loam	*CL, CH	*A-7, A-6	0	0	100	100	98-10	
	45-60	*Silty clay loam, silt loam	*CL, CH	*A-7, A-4	0	0	100	100	98-10	
Tilma-----	0-8	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	
	8-14	*Silt loam	*CL	*A-6, A-4	0	0	100	100	100	
	14-20	*Silt loam	*CL	*A-4	0	0	100	100	100	
	20-23	*Silt loam	*CL, CL-ML	*A-4	0	0	100	100	100	
	23-30	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	
421: Naff-----	30-34	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	100	100	100	
	34-42	*Silty clay, silty clay loam	*CH, CL	*A-7, A-6	0	0	100	100	100	
	42-60	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	100	
	0-8	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	100	100	98-10	
	8-17	*Silt loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	17-26	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	100	100	98-10	
	26-61	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	100	100	95-10	
	61-80	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	95-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
421: Garfield-----	In					Pct	Pct			
	0-5	*Silt loam	*CL	*A-6, A-4	0	0	0	100	100	98-10
	5-8	*Silt loam, silty clay loam	*CL	*A-6, A-4	0	0	0	100	100	98-10
	8-19	*Silty clay loam, silty clay	*CL, CH	*A-7	0	0	0	100	100	98-10
	19-32	*Silty clay, silty clay loam	*CH, CL	*A-7	0	0	0	100	100	98-10
	32-45	*Silty clay loam, silt loam	*CL, CH	*A-7, A-6	0	0	0	100	100	98-10
500: Hobo-----	45-60	*Silty clay loam, silt loam	*CL, CH	*A-7, A-4	0	0	0	100	100	98-10
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	0	80-100	75-100	70-95
	3-8	*Ashy silt loam	*ML	*A-4, A-5	0	0	0	80-100	75-100	70-95
	8-18	*Ashy silt loam	*ML	*A-4, A-5	0	0	0	80-100	75-100	70-95
Threebear-----	18-22	*Silt loam	*CL-ML, CL	*A-4	0	0	0	90-100	85-100	80-90
	22-30	*Silt loam	*CL-ML, CL	*A-4	0	0	0	85-95	80-90	75-85
	30-44	*Gravelly loam, gravelly silt loam, silt loam	*CL, GC-GM	*A-4	0	0	0	60-90	55-85	50-70
	44-60	*Very gravelly loam, extremely gravelly loam, extremely gravelly silt loam	*GC-GM, GC	*A-2, A-1	0	0-15	35-55	30-50	25-45	
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-10
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-10
	3-4	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-10
	4-9	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-10
	9-20	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-10
	20-24	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-10
	24-34	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-10
	34-55	*Silt loam, silty clay loam	*CL	*A-4, A-6	0	0	0	100	100	90-10
	55-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-10

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
501: Hobo, warm-----	In				Pct	Pct					
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10		
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10		
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	80-100	75-100	70-95		
	3-8	*Ashy silt loam	*ML	*A-4, A-5	0	0	80-100	75-100	70-95		
	8-18	*Ashy silt loam	*ML	*A-4, A-5	0	0	80-100	75-100	70-95		
	18-22	*Silt loam	*CL-ML, CL	*A-4	0	0	90-100	85-100	80-90		
	22-30	*Silt loam	*CL-ML, CL	*A-4	0	0	85-95	80-90	75-85		
	30-44	*Gravelly loam, gravelly silt loam, silt loam	*CL, GC-GM	*A-4	0	0	60-90	55-85	50-70		
	44-60	*Very gravelly loam, extremely gravelly loam, extremely gravelly silt loam	*GC-GM, GC	*A-2, A-1	0	0-15	35-55	30-50	25-45		
Threebear, warm	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10		
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10		
	2-3	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10		
	3-7	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10		
	7-18	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10		
	18-29	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10		
	29-36	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10		
	36-48	*Silt loam, silty clay loam	*CL	*A-4, A-6	0	0	100	100	90-10		
	48-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	100	100	90-10		

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
510: Honeyjones-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash silt loam	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
510: Ahrs-----	<i>In</i>					<i>Pct</i>				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	45-55	40-50	35-45	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	40-50	35-45	30-45	
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	35-45	30-40	25-35	
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	35-45	30-40	25-35	
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	35-45	30-40	25-35	
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	35-45	30-40	25-35	
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	35-45	30-40	25-35	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
600: Ardenvoir-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ashly silt loam	*ML, MH, GM	*A-5, A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ashly silt loam, gravelly ashly loam	*GM	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GC-GM, GC, GM	*A-4, A-2	0	0-30	0	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GC-GM, GM	*A-2, A-1	0-30	20-60	0	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GC-GM, GM	*A-1, A-2	0-20	20-60	0	35-45	30-40	20-35
	48-60	*Bedrock	---	---	---	---	---	---	---	---
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
Huckle-----	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	3-4	*Ashy silt loam, gravelly ashly silt loam	*ML, MH	*A-5, A-4	0	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ashly silt loam	*ML	*A-4	0	0	0	75-100	75-100	70-90
	8-19	*Gravelly ashly silt loam, ashly silt loam	*ML, GM	*A-4	0	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, extremely cobbly loam, very gravelly loam	*GC-GM, GC, GM	*A-4, A-1	0	25-65	0	40-70	35-65	30-60
	28-38	*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GC-GM, GC, GM	*A-2, A-4, A-1	0	10-60	0	35-65	30-60	20-55
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GC-GM, GC, GW-GM, GC	*A-1, A-2	0-15	20-65	0	35-65	30-60	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-						
			Unified	AASHTO	>10 inches	3-10 inches	Pct	Pct	4	10	40		
601: Ardenvoir-----	In					Pct	Pct						
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10			
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10			
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	65-75	60-70	55-65	55-65			
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	65-75	60-70	50-65	50-65			
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65	40-65			
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55	35-55			
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35	20-35			
	48-58	*Bedrock	---	---	---	---	---	---	---	---			
	McCrosket-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10		
1-2		*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10			
2-12		*Gravelly ash silt loam	*GC-GM, GM, CL	*A-4, A-2	0	0-25	55-75	50-70	45-65	45-65			
12-32		*Very cobbly silt loam, very cobbly loam, very gravelly loam	*GC, GC-GM	*A-2, A-6	0	20-50	45-60	40-55	35-50	35-50			
32-42		*Extremely cobbly loam, very stony silt loam, extremely gravelly loam	*CL-ML, CL, GM	*A-4, A-1	0-15	30-60	30-80	25-75	25-65	25-65			
42-52		*Bedrock	---	---	---	---	---	---	---	---			

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pas sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
605: Benewah-----	In				Pct	Pct				
	0-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0	95-100	90-100	90-100
	6-15	*Ashy silt loam	*CL-ML, CL, ML	*A-4		0	0-10	95-100	90-100	90-100
	15-18	*Silt loam	*CL-ML, ML	*A-4		0	0-10	95-100	90-100	90-100
	18-23	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0-10	90-100	85-100	85-100
	23-34	*Silty clay loam, silt loam	*CL	*A-6, A-4		0	0-10	90-100	85-100	85-100
	34-60	*Silty clay loam, gravelly silty clay loam, silt loam	*CL	*A-6, A-7, A-4		0	0-10	80-100	75-100	70-100
Rasser-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-100
	2-4	*Ashy silt loam	*CL-ML, GM, CL	*A-4		0	0	60-100	55-100	50-90
	4-11	*Ashy silt loam, gravelly ashy silt loam	*CL-ML, GM, CL	*A-4		0	0	55-100	50-100	45-90
	11-20	*Very cobbly silt loam, very gravelly loam, gravelly silt loam	*CL, GC-GM	*A-4, A-6, A-1		0	0-45	40-75	35-70	30-65
	20-41	*Very gravelly silty- clay loam, very cobbly silt loam, extremely cobbly clay loam	*GC	*A-2, A-6		0	5-45	40-60	35-55	30-50
	41-60	*Very cobbly silty clay loam, extremely gravelly silt loam, extremely cobbly loam	*SC, GC	*A-6, A-7, A-2		0	30-55	30-70	25-65	20-60

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
606: Benewah-----	In				Pct	Pct				
	0-6	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0	95-100	90-100	90-100	90-100
	6-15	*Ashy silt loam	*CL-ML, CL, ML	*A-4	0	0-10	95-100	90-100	90-100	90-100
	15-18	*Silt loam	*CL-ML, ML	*A-4	0	0-10	95-100	90-100	90-100	90-100
	18-23	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0-10	90-100	85-100	85-100	85-100
	23-34	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0-10	90-100	85-100	85-100	85-100
	34-60	*Silty clay loam, gravelly silty clay loam, silt loam	*CL	*A-6, A-7, A-4	0	0-10	80-100	75-100	70-100	70-100
Rasser-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	2-4	*Ashy silt loam	*CL-ML, GM, CL	*A-4	0	0	60-100	55-100	50-90	50-90
	4-11	*Ashy silt loam, gravelly ashy silt loam	*CL-ML, GM, CL	*A-4	0	0	55-100	50-100	45-90	45-90
	11-20	*Very cobbly silt loam, very gravelly loam, gravelly silt loam	*CL, GC-GM	*A-4, A-6, A-1	0	0-45	40-75	35-70	30-65	30-65
	20-41	*Very gravelly silty clay loam, very cobbly silt loam, extremely cobbly clay loam	*GC	*A-2, A-6	0	5-45	40-60	35-55	30-50	30-50
	41-60	*Very cobbly silty clay loam, extremely gravelly silt loam, extremely cobbly loam	*SC, GC	*A-6, A-7, A-2	0	30-55	30-70	25-65	20-60	20-60

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
610: Schumacher-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-8	*Silt loam	*ML	*A-7, A-4	0	0	85-100	80-100	75-95
	8-20	*Silt loam	*CL	*A-6, A-7	0	0	85-100	80-100	75-95
	20-27	*Silt loam	*CL	*A-6	0	0	85-100	80-100	75-95
	27-34	*Gravelly silt loam, gravelly silty clay loam	*CL	*A-6, A-7	0	0	70-80	65-75	60-75
	34-41	*Very cobbly clay loam, very cobbly silty clay loam	*CL, GC	*A-7, A-6	0	20-35	60-70	55-65	50-60
611: Schumacher-----	41-47	*Gravelly clay loam, very gravelly silty clay loam	*CL	*A-6, A-7	0	5-20	65-80	60-75	55-70
	47-57	*Bedrock	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-8	*Silt loam	*ML, CL-ML	*A-4	0	0	85-100	80-100	75-95
	8-20	*Silt loam	*ML, CL	*A-4, A-6	0	0	85-100	80-100	75-95
	20-27	*Silt loam	*CL	*A-6, A-4	0	0	85-100	80-100	75-95
	27-34	*Gravelly silt loam, gravelly silty clay loam	*CL	*A-6, A-4	0	0	70-80	65-75	60-75
	34-41	*Very cobbly clay loam, very cobbly silty clay loam	*CL, GC	*A-6	0	20-35	60-70	55-65	50-60
	41-47	*Gravelly clay loam, very gravelly silty clay loam	*CL	*A-6	0	5-20	65-80	60-75	55-70
	47-57	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
611: Tekoa-----	In				Pct	Pct					
	0-7	*Gravelly ashy silt loam	*GC-GM, GM, ML	*A-4		0	0	55-75	50-70	45-65	
	7-13	*Very cobbly silt loam, gravelly silt loam	*CL, ML, GC-GM	*A-4		0	10-30	65-80	60-75	55-70	
	13-17	*Very cobbly silt loam, very gravelly silt loam	*GM, GC-GM, GC	*A-4, A-2, A-6		0	15-45	45-65	40-60	35-55	
	17-27	*Very cobbly silty clay loam, extremely gravelly loam, very cobbly clay loam	*GC	*A-6, A-2		0	20-40	45-55	40-50	35-45	
	27-33	*Very gravelly silty clay loam, extremely cobbly clay loam, very cobbly loam	*GC	*A-2, A-7		0	15-35	35-55	30-50	25-45	
	33-43	*Bedrock	---	---		---	---	---	---	---	
612: Libertybutte----	0-4	*Gravelly silt loam	*CL-ML, GC-GM, ML	*A-4		0	0	55-75	55-75	45-70	
	4-11	*Gravelly silt loam, gravelly loam	*ML, GC, CL	*A-4, A-6		0	0	60-75	55-75	50-70	
	11-16	*Very gravelly silt loam, gravelly loam	*GM, CL, GC	*A-4, A-2, A-6		0	0-19	50-65	45-65	40-60	
	16-19	*Bedrock	---	---		---	---	---	---	---	
	19-29	*Bedrock	---	---		---	---	---	---	---	
	0-7	*Gravelly ashy silt loam	*GC-GM, GM, ML	*A-4		0	0	55-75	50-70	45-65	
	7-13	*Very cobbly silt loam, gravelly silt loam	*CL, ML, GC-GM	*A-4		0	10-30	65-80	60-75	55-70	
Tekoa-----	13-17	*Very cobbly silt loam, very gravelly silt loam	*GM, GC-GM, GC	*A-4, A-2, A-6		0	15-45	45-65	40-60	35-55	
	17-27	*Very cobbly silty clay loam, extremely gravelly loam, very cobbly clay loam	*GC	*A-6, A-2		0	20-40	45-55	40-50	35-45	
	27-33	*Very gravelly silty clay loam, extremely cobbly clay loam, very cobbly loam	*GC	*A-2, A-7		0	15-35	35-55	30-50	25-45	
	33-43	*Bedrock	---	---		---	---	---	---	---	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
613: Ardenvoir, dry--	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-3	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	60-75	50-70	45-65
	3-11	*Gravelly ash silt loam, gravelly ash loam	*ML, CL, GM	*A-4	0	0	0	60-75	50-70	45-65
	11-18	*Very gravelly loam, very gravelly silt loam	*GM, GC	*A-2, A-1, A-4	0	10-40	45-65	40-60	35-55	
	18-32	*Extremely gravelly loam, very cobbly silt loam	*GM, GC	*A-2, A-1, A-4	0	25-55	45-65	40-60	30-50	
	32-41	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0-15	25-60	35-55	30-50	25-35	
	41-60	*Extremely stony loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1	0-50	25-55	30-50	25-45	25-35	
	60-70	*Bedrock	---	---	---	---	---	---	---	---
Lotuspoint-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-4	*Gravelly ash silt loam	*GM, MH	*A-2, A-5	0	0-10	50-70	45-65	40-60	
	4-10	*Stony ash silt loam, very cobbly ash silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	40-65	35-65	30-60	
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-55	25-50	20-45	
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-55	25-50	20-40	
	26-36	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
614: Ardenvoir, dry--	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	60-75	50-70	45-65
	3-11	*Gravelly ash silt loam, gravelly ash loam	*ML, CL, GM	*A-4	0	0	60-75	50-70	45-65
	11-18	*Very gravelly loam, very gravelly silt loam	*GM, GC	*A-2, A-1, A-4	0	10-40	45-65	40-60	35-55
	18-32	*Extremely gravelly loam, very cobbly silt loam	*GM, GC	*A-2, A-1, A-4	0	25-55	45-65	40-60	30-50
	32-41	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0-15	25-60	35-55	30-50	25-35
	41-60	*Extremely stony loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1	0-50	25-55	30-50	25-45	25-35
	60-70	*Bedrock	---	---	---	---	---	---	---
Lotuspoint-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-4	*Gravelly ash silt loam	*GM, MH	*A-2, A-5	0	0-10	50-70	45-65	40-60
	4-10	*Stony ash silt loam, very cobbly ash silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	40-65	35-65	30-60
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-55	25-50	20-45
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-55	25-50	20-40
	26-36	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
617: Tekoa-----	In				Pct	Pct					
	0-7	*Gravelly ashy silt loam	*GC-GM, GM, ML	*A-4		0	0	55-75	50-70	45-65	
	7-13	*Very cobbly silt loam, gravelly silt loam	*CL, ML, GC-GM	*A-4		0	10-30	65-80	60-75	55-70	
	13-17	*Very cobbly silt loam, very gravelly silt loam	*GM, GC-GM, GC	*A-4, A-2, A-6		0	15-45	45-65	40-60	35-55	
	17-27	*Very cobbly silty clay loam, extremely gravelly loam, very cobbly clay loam	*GC	*A-6, A-2		0	20-40	45-55	40-50	35-45	
	27-33	*Very gravelly silty clay loam, extremely cobbly clay loam, very cobbly loam	*GC	*A-2, A-7		0	15-35	35-55	30-50	25-45	
	33-43	*Bedrock	---	---		---	---	---	---	---	
	621: Huckle-----	0-2	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-10
		2-3	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-10
		3-4	*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5		0	0	75-100	75-100	70-85
4-8		*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5		0	0	75-100	75-100	70-90	
8-19		*Gravelly ashy silt loam, ashy silt loam	*ML, MH, GM	*A-4, A-5		0	0	60-90	55-85	50-80	
19-28		*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1		0	25-65	40-70	35-65	30-60	
28-38		*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1		0	10-60	35-65	30-60	20-55	
38-47		*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2		0-15	20-65	35-65	30-60	20-55	
47-57		*Bedrock	---	---		---	---	---	---	---	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
625: Huckle-----	In				Pct	Pct					
	0-2	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	2-3	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	3-4	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5		0	0	75-100	75-100	70-85	
	4-8	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5		0	0	75-100	75-100	70-90	
	8-19	*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5		0	0	60-90	55-85	50-80	
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1		0	25-65	40-70	35-65	30-60	
	28-38	*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1		0	10-60	35-65	30-60	20-55	
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2		0-15	20-65	35-65	30-60	20-55	
	47-57	*Bedrock	---	---		---	---	---	---	---	
Ardenvoir-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	2-6 6-11	*Gravelly ash silt loam *Gravelly ash silt loam, gravelly ash loam	*ML, CL, GM *GM, GC	*A-4 *A-4, A-2		0 0	0 0	65-75 65-75	60-70 60-70	55-65 50-65	
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2		0	0-30	55-75	50-70	40-65	
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1		0-30	20-60	45-65	40-60	35-55	
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2		0-20	20-60	35-45	30-40	20-35	
	48-58	*Bedrock	---	---		---	---	---	---	---	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
650: Grangemont-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-4	*Ashy silt loam	*ML	*A-4, A-5	0	0	100	100	90-100
	4-10	*Ashy silt loam	*ML	*A-4, A-5	0	0	100	100	90-100
	10-18	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	95-100
	18-25	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	95-100
	25-34	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-100
	34-42	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-100
	42-53	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-100
651: Kingspeak-----	53-63	*Cobbly silty clay loam, silty clay loam	*CL	*A-6, A-4	0	0-30	95-100	90-100	85-95
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	80-98
	3-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	90-100	90-100	80-98
	10-30	*Silt loam, gravelly loam	*CL, CL-ML	*A-4	0	0-15	75-100	70-100	65-96
	30-60	*Silt loam, gravelly loam, silty clay loam	*CL, CL-ML	*A-6, A-4	0	0-15	75-100	70-100	65-96

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number--			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
651: Shayhill, stony surface-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	2-3	*Ashy silt loam	*ML	*A-4	0	0	80-90	80-90	70-85	
	3-10	*Ashy silt loam	*ML	*A-4	0	0-9	80-90	80-90	70-85	
	10-19	*Cobbly silt loam, gravelly silt loam	*CL-ML, CL	*A-4	0-7	8-30	80-90	80-90	65-85	
	19-28	*Very stony silt loam, very cobbly silt loam	*CL-ML, CL	*A-4	0-38	8-31	70-90	70-85	60-80	
	28-48	*Extremely cobbly loam, extremely stony clay loam, very cobbly silt loam	*GC	*A-2, A-6	0-27	15-28	30-70	25-65	20-60	
	48-55	*Extremely stony loam, very cobbly loam, extremely cobbly loam	*GC, CL, GC-GM	*A-2, A-1, A-6	0-33	15-39	45-80	40-75	35-70	
652: Kingspeak-----	55-64	*Extremely cobbly loam, extremely stony loam, very cobbly loam	*GC, GC-GM	*A-2, A-4, A-1	0-33	15-39	40-70	35-70	30-60	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	80-98	
	3-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	90-100	90-100	80-98	
	10-30	*Silt loam, gravelly loam	*CL, CL-ML	*A-4	0	0-15	75-100	70-100	65-96	
	30-60	*Silt loam, gravelly loam, silty clay loam	*CL, CL-ML	*A-6, A-4	0	0-15	75-100	70-100	65-96	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
653: Kingspeak, cool	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	80-98	
	3-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	90-100	90-100	80-98	
	10-30	*Silt loam, gravelly loam	*CL, CL-ML	*A-4	0	0-15	75-100	70-100	65-96	
	30-60	*Silt loam, gravelly loam, silty clay loam	*CL, CL-ML	*A-6, A-4	0	0-15	75-100	70-100	65-96	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	80-98	
	3-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	90-100	90-100	80-98	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
655: Tigley, moist----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-4	*Gravelly ash silt loam	*ML, GM	*A-4	0	0	0	55-70	50-70	45-70
	4-9	*Gravelly ash silt loam	*CL-ML, CL, GM	*A-4	0	0	0	55-75	50-70	45-70
	9-34	*Very gravelly silt loam, very cobbly loam, gravelly loam	*GC, CL, GC-GM	*A-4, A-6, A-2	0	0-20	0-20	40-70	40-65	35-65
656: Kingspeak, dry--	34-60	*Very gravelly loam, very cobbly silt loam, extremely gravelly loam	*GC	*A-2	0	0-22	0-22	25-45	20-40	15-40
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML	*A-4	0	0	0	90-100	90-100	80-98
	3-10	*Ashy silt loam	*CL-ML, ML	*A-4	0	0	0	90-100	90-100	80-98
	10-30	*Silt loam, gravelly loam	*CL, CL-ML	*A-4	0	0-15	0-15	75-100	70-100	65-96
660: Threbear-----	30-60	*Silt loam, gravelly loam, silty clay loam	*CL, CL-ML	*A-6, A-4	0	0-15	0-15	75-100	70-100	65-96
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	3-4	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-100
	4-9	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-100
	9-20	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	0	100	100	90-100
	20-24	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-100
	24-34	*Silt loam	*CL-ML, CL	*A-4	0	0	0	100	100	90-100
	34-55	*Silt loam, silty clay loam	*CL	*A-4, A-6	0	0	0	100	100	90-100
	55-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	0	100	100	90-100

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
662: Threebear, warm	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	2-3	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	3-7	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	7-18	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	18-29	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10	
	29-36	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10	
663: Threebear, warm	36-48	*Silt loam, silty clay loam	*CL	*A-4, A-6	0	0	100	100	90-10	
	48-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	100	100	90-10	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	90-10	
	2-3	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	3-7	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	7-18	*Medial silt loam	*ML, MH	*A-4, A-5	0	0	100	100	90-10	
	18-29	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10	
Porrett-----	29-36	*Silt loam	*CL-ML, CL	*A-4	0	0	100	100	90-10	
	36-48	*Silt loam, silty clay loam	*CL	*A-4, A-6	0	0	100	100	90-10	
	48-60	*Silty clay loam, silt loam	*CL	*A-6, A-4	0	0	100	100	90-10	
	0-3	*Ashy silt loam	*ML, CL, CL-ML	*A-4, A-6	0	0	100	100	95-10	
	3-14	*Ashy silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-10	
	14-21	*Silt loam	*CL, CL-ML	*A-4, A-6	0	0	100	100	95-10	
	21-60	*Silty clay loam, silt loam	*CL	*A-6, A-7	0	0	100	100	90-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
665: Grangemont, warm	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-4	*Ashy silt loam	*ML	*A-4, A-5	0	0	100	100	90-100
	4-10	*Ashy silt loam	*ML	*A-4, A-5	0	0	100	100	90-100
	10-18	*Silt loam	*CL-ML, CL	*A-4	0	0	100	95-100	90-100
	18-25	*Silt loam	*CL-ML, CL	*A-4	0	0	100	95-100	90-100
	25-34	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	95-100	90-100
	34-42	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	95-100	90-100
	42-53	*Silt loam, silty clay loam	*CL, CL-ML	*A-4, A-6	0	0	100	95-100	90-100
	53-63	*Cobbly silty clay loam, silty clay loam	*CL	*A-6, A-4	0	0-30	95-100	90-100	85-95

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
670: Honeyjones, warm	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
671: Honeyjones-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash silt loam	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
680: Ardenvoir-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	0	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	0	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	0	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
Huckle-----	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	3-4	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-90
	8-19	*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5	0	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	0	40-70	35-65	30-60
	28-38	*Extremely cobbly loam loam, very gravelly silt loam, very cobbly fine sandy loam,	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	0	35-65	30-60	20-55
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	0	35-65	30-60	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
681: Huckle-----	In				Pct	Pct			
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	3-4	*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-90
	8-19	*Gravelly ashy silt loam, ashy silt loam	*ML, MH, GM	*A-4, A-5	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, very gravelly loam,	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60
	28-38	*Extremely cobbly loam *Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam,	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55
	38-47	*Extremely cobbly loam *Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
681: Ahrs-----	<i>In</i>					<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	0	45-55	40-50	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	0	40-50	35-45	30-45
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	0	35-45	30-40	25-35
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	0	35-45	30-40	25-35
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	0	35-45	30-40	25-35
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	0	35-45	30-40	25-35
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	0	35-45	30-40	25-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
700: Ardenvoir-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ashly silt loam	*ML, CL, GM	*A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ashly silt loam, gravelly ashly loam	*GM, GC	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	0	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	0	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	0	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
Huckle-----	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	3-4	*Ashy silt loam, gravelly ashly silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ashly silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-90
	8-19	*Gravelly ashly silt loam, ashly silt loam	*ML, MH, GM	*A-4, A-5	0	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	0	40-70	35-65	30-60
	28-38	*Extremely cobbly loam loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	0	35-65	30-60	20-55
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	0	35-65	30-60	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-		
			Unified	AASHTO	>10 inches	3-10 inches			
							4	10	40
701: Ardenvoir-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---
	McCrosket-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100
1-2		*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
2-12		*Gravelly ash silt loam	*GC-GM, GM, CL	*A-4, A-2	0	0-25	55-75	50-70	45-65
12-32		*Very cobbly silt loam, very cobbly loam, very gravelly loam	*GC, GC-GM	*A-2, A-6	0	20-50	45-60	40-55	35-50
32-42		*Extremely cobbly loam, very stony silt loam, extremely gravelly loam	*CL-ML, CL, GM	*A-4, A-1	0-15	30-60	30-80	25-75	25-65
42-52		*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
703: Ardenvoir, dry--	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Gravelly ash silt loam	*ML, GM	*A-5, A-4	0	0	60-75	50-70	45-65
	3-11	*Gravelly ash silt loam, gravelly ash loam	*ML, GM	*A-4	0	0	60-75	50-70	45-65
	11-18	*Very gravelly loam, very gravelly silt loam	*GC-GM, GC, GM	*A-2, A-1, A-4	0	10-40	45-65	40-60	35-55
	18-32	*Extremely gravelly loam, very cobbly silt loam	*GC-GM, GC, GM	*A-2, A-1, A-4	0	25-55	45-65	40-60	30-50
	32-41	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam	*GC-GM, GM	*A-1, A-2	0-15	25-60	35-55	30-50	25-35
	41-60	*Extremely stony loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GC-GM, GM	*A-1	0-50	25-55	30-50	25-45	25-35
	60-70	*Bedrock	---	---	---	---	---	---	---
Ardenvoir-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, MH, GM	*A-5, A-4	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM	*A-4, A-2	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GC-GM, GC, GM	*A-4, A-2	0	0-30	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GC-GM, GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GC-GM, GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35
	48-60	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
704: Ardenvoir, dry--	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Gravelly ash silt loam	*ML, MH, GM	*A-5, A-4	0	0	60-75	50-70	45-65
	3-11	*Gravelly ash silt loam, gravelly ash loam	*ML, GM	*A-4	0	0	60-75	50-70	45-65
	11-18	*Very gravelly loam, very gravelly silt loam	*GC-GM, GC, GM	*A-2, A-1, A-4	0	10-40	45-65	40-60	35-55
	18-32	*Extremely gravelly loam, very cobbly silt loam	*GC-GM, GC, GM	*A-2, A-1, A-4	0	25-55	45-65	40-60	30-50
	32-41	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam	*GC-GM, GM	*A-1, A-2	0-15	25-60	35-55	30-50	25-35
	41-60	*Extremely stony loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GC-GM, GM	*A-1	0-50	25-55	30-50	25-45	25-35
	60-70	*Bedrock	---	---	---	---	---	---	---
Ardenvoir-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, MH, GM	*A-5, A-4	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM	*A-4, A-2	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GC-GM, GC, GM	*A-4, A-2	0	0-30	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GC-GM, GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GC-GM, GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35
	48-60	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
705: Ardenvoir-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-6	*Gravelly ashly silt loam	*ML, CL, GM	*A-4	0	0	65-75	60-70	55-65
	6-11	*Gravelly ashly silt loam, gravelly ashly loam	*GM, GC	*A-4, A-2	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---
Rasser-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-4	*Ashy silt loam	*CL-ML, GM, CL	*A-4	0	0	60-100	55-100	50-90
	4-11	*Ashy silt loam, gravelly ashly silt loam	*CL-ML, GM, CL	*A-4	0	0	55-100	50-100	45-90
	11-20	*Very cobbly silt loam, very gravelly loam, gravelly silt loam	*CL, GC-GM	*A-4, A-6, A-1	0	0-45	40-75	35-70	30-65
	20-41	*Very gravelly silty clay loam, very cobbly silt loam, extremely cobbly clay loam	*GC	*A-2, A-6	0	5-45	40-60	35-55	30-50
	41-60	*Very cobbly silty clay loam, extremely gravelly silt loam, extremely cobbly loam	*SC, GC	*A-6, A-7, A-2	0	30-55	30-70	25-65	20-60

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
706: Ardenvoir-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65	
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55	
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35	
	48-58	*Bedrock	---	---	---	---	---	---	---	---
707: Huckle, dry-----	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	3-4	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-85	
	4-8	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-90	
	8-19	*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5	0	0	60-90	55-85	50-80	
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60	
	28-38	*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55	
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55	
	47-57	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
707: Ardenvoir-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55
710: McCrosket-----	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-12	*Gravelly ash silt loam	*GC-GM, GM, CL	*A-4, A-2	0	0-25	55-75	50-70	45-65
	12-32	*Very cobbly silt loam, very cobbly loam, very gravelly loam	*GC, GC-GM	*A-2, A-6	0	20-50	45-60	40-55	35-50
	32-42	*Extremely cobbly loam, very stony silt loam, extremely gravelly loam	*CL-ML, CL, GM	*A-4, A-1	0-15	30-60	30-80	25-75	25-65
	42-52	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
710: Ardenvoir-----	In						Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	0	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	0	45-65	40-60	35-55
711: McCrosket-----	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	0	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-12	*Gravelly ash silt loam	*GC-GM, GM, CL	*A-4, A-2	0	0-25	0	55-75	50-70	45-65
	12-32	*Very cobbly silt loam, very cobbly loam, very gravelly loam	*GC, GC-GM	*A-2, A-6	0	20-50	0	45-60	40-55	35-50
	32-42	*Extremely cobbly loam, very stony silt loam, extremely gravelly loam	*CL-ML, CL, GM	*A-4, A-1	0-15	30-60	0	30-80	25-75	25-65
42-52	*Bedrock		---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
711: Ardenvoir-----	In						Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	65-75	60-70	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	0	65-75	60-70	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	0	55-75	50-70	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	0	45-65	40-60	35-55
712: McCrosket-----	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	0	35-45	30-40	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-12	*Gravelly ash silt loam	*GC-GM, GM, CL	*A-4, A-2	0	0-25	0	55-75	50-70	45-65
	12-32	*Very cobbly silt loam, very cobbly loam, very gravelly loam	*GC, GC-GM	*A-2, A-6	0	20-50	0	45-60	40-55	35-50
	32-42	*Extremely cobbly loam, very stony silt loam, extremely gravelly loam	*CL-ML, CL, GM	*A-4, A-1	0-15	30-60	0	30-80	25-75	25-65
	42-52	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
712: Tekoa-----	In				Pct	Pct					
	0-7	*Gravelly ash silt loam	*GC-GM, GM, ML	*A-4		0	0	55-75	50-70	45-65	
	7-13	*Very cobbly silt loam, gravelly silt loam	*CL, ML, GC-GM	*A-4		0	10-30	65-80	60-75	55-70	
	13-17	*Very cobbly silt loam, very gravelly silt loam	*GM, GC-GM, GC	*A-4, A-2, A-6		0	15-45	45-65	40-60	35-55	
	17-27	*Very cobbly silty clay loam, extremely gravelly loam, very cobbly clay loam	*GC	*A-6, A-2		0	20-40	45-55	40-50	35-45	
	27-33	*Very gravelly silty clay loam, extremely cobbly clay loam, very cobbly loam	*GC	*A-2, A-7		0	15-35	35-55	30-50	25-45	
	33-43	*Bedrock	---	---		---	---	---	---	---	
716: Ahrs-----	0-1	*Slightly decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8		0	0	100	100	60-10	
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4		0	0-25	45-55	40-50	35-45	
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1		0	0-25	40-50	35-45	30-45	
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2		0	0-50	35-45	30-40	25-35	
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2		0	10-60	35-45	30-40	25-35	
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2		0	35-70	35-45	30-40	25-35	
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2		0	55-80	35-45	30-40	25-35	
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2		0	45-70	35-45	30-40	25-35	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
720: Huckle-----	In				Pct	Pct			
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	3-4	*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-90
	8-19	*Gravelly ashy silt loam, ashy silt loam	*ML, MH, GM	*A-4, A-5	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, very gravelly loam,	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60
	28-38	*Extremely cobbly loam *Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam,	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55
	38-47	*Extremely cobbly loam *Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
721: Huckle-----	In					Pct	Pct			
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	3-4	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-85
	4-8	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	0	75-100	75-100	70-90
	8-19	*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5	0	0	0	60-90	55-85	50-80
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60	30-60
	28-38	*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55	20-55
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---	---
Ardenvoir-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	2-6	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	65-75	60-70	55-65	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam	*GM, GC	*A-4, A-2	0	0	65-75	60-70	50-65	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
735: Lotuspoint, stony surface--	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-4	*Stony ashy silt loam	*GM	*A-4, A-2, A-5	0-20	0-20	0-20	50-65	45-65	40-60
	4-10	*Stony ashy silt loam, very cobbly ashy silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	0-30	40-65	35-65	30-60
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-45	30-55	25-50	20-45
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-50	30-55	25-50	20-40
736: Lotuspoint, stony surface--	26-36	*Bedrock	---	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-4	*Stony ashy silt loam	*GM	*A-4, A-2, A-5	0-20	0-20	0-20	50-65	45-65	40-60
	4-10	*Stony ashy silt loam, very cobbly ashy silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	0-30	40-65	35-65	30-60
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-45	30-55	25-50	20-45
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-50	30-55	25-50	20-40
Rock outcrop----	26-36	*Bedrock	---	---	---	---	---	---	---	---
	0-60	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
756: Tigley-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT			0	0	100	100	60-10
	2-4	*Gravelly ash silt loam	*ML, GM			0	0	55-70	50-70	45-70
	4-9	*Gravelly ash silt loam	*CL-ML, CL, GM			0	0	55-75	50-70	45-70
	9-34	*Very gravelly silt loam, very cobbly loam, gravelly loam	*GC, CL, GC-GM			0	0-20	40-70	40-65	35-65
	34-60	*Very gravelly loam, very cobbly silt loam, extremely gravelly loam	*GC			0	0-22	25-45	20-40	15-40
757: Hugus, warm-----	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT			0	0	100	100	60-10
	2-4	*Ashy silt loam	*ML, MH			0	0	85-100	80-100	75-95
	4-9	*Ashy silt loam	*ML			0	0	85-100	80-100	75-95
	9-20	*Ashy silt loam, gravelly ash silt loam	*ML, GM			0	0	60-95	55-95	55-90
	20-39	*Very gravelly silt loam, extremely gravelly silt loam, very gravelly loam	*GC-GM, GC			0	0-20	40-60	35-55	35-50
	39-55	*Extremely gravelly silt loam, extremely gravelly loam, very gravelly silt loam	*GC-GM, GC			0	0-30	30-50	25-45	20-40
	55-63	*Extremely gravelly loam, extremely gravelly silt loam	*GC-GM, GC			0	0-30	30-45	25-40	20-30

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
758: Tigley, moist----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-4	*Gravelly ash silt loam	*ML, GM	*A-4	0	0	0	55-70	50-70	45-70
	4-9	*Gravelly ash silt loam	*CL-ML, CL, GM	*A-4	0	0	0	55-75	50-70	45-70
	9-34	*Very gravelly silt loam, very cobbly loam, gravelly loam	*GC, CL, GC-GM	*A-4, A-6, A-2	0	0-20	40-70	40-65	35-65	
Hugus-----	34-60	*Very gravelly loam, very cobbly silt loam, extremely gravelly loam	*GC	*A-2	0	0-22	25-45	20-40	15-40	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-4	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	85-100	80-100	75-95	
	4-9	*Ashy silt loam	*ML	*A-4, A-5	0	0	85-100	80-100	75-95	
	9-20	*Ashy silt loam, gravelly ash silt loam	*ML, GM	*A-4, A-5	0	0	60-95	55-95	50-90	
	20-31	*Very gravelly silt loam, extremely gravelly silt loam, very gravelly loam	*GC-GM, GC	*A-2, A-1, A-4	0	0-15	40-60	35-55	30-50	
	31-47	*Extremely gravelly silt loam, extremely gravelly loam, very gravelly silt loam	*GC-GM, GC	*A-2, A-1	0-15	0-30	30-50	25-45	20-40	
	47-60	*Extremely gravelly loam, extremely gravelly silt loam	*GC-GM, GC	*A-2, A-1	0-15	0-30	30-45	25-40	20-35	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
765: Saint Maries----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-4	*Very gravelly ash silt loam	*GM, GC-GM	*A-4, A-2	0	0-10	50-60	45-55	40-50
	4-9	*Very gravelly ash silt loam	*GM, GC-GM	*A-2, A-4	0	0-25	45-55	40-50	35-45
	9-22	*Very gravelly ash loam, very gravelly ashy silt loam	*GM, GC-GM	*A-2, A-4	0	10-30	45-55	40-50	35-45
	22-28	*Extremely gravelly loam, extremely cobbly loam, extremely gravelly silt loam	*GM, GC-GM, GP-GM	*A-1	0	15-45	25-35	20-30	15-25
	28-38	*Extremely flaggy loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1	0	15-50	30-40	25-35	20-30
	38-47	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1	0	30-60	30-40	25-35	20-30
	47-60	*Extremely cobbly loam, extremely stony sandy loam, extremely stony silt loam	*GM, GC-GM, GP-GM	*A-1	0-40	15-55	30-40	25-35	20-30

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
765: Huckle-----	In				Pct	Pct				
	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	2-3	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	3-4	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-85	70-85
	4-8	*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-90	70-90
	8-19	*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5	0	0	60-90	55-85	50-80	50-80
	19-28	*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60	30-60
	28-38	*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55	20-55
	38-47	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55	20-55
	47-57	*Bedrock	---	---	---	---	---	---	---	---
770: Pinecreek-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	60-100
	2-6	*Gravelly ash silt loam	*GM, MH	*A-4, A-2, A-5	0	0	45-65	40-65	40-60	40-60
	6-12	*Gravelly ash silt loam	*GM, ML	*A-4, A-2	0	0	45-65	40-60	40-55	40-55
	12-19	*Gravelly ash silt loam	*GM	*A-4, A-2	0	0-18	40-65	40-60	35-55	35-55
	19-24	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-18	40-65	40-60	35-55	35-55
	24-30	*Very gravelly loam, extremely gravelly loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0	0-35	30-50	25-45	20-40	20-40
	30-70	*Extremely cobbly loam, extremely flaggy loam, extremely gravelly sandy loam	*GM, GP-GM, GC-GM	*A-1	0-32	13-53	15-40	10-40	10-35	10-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
771: Honeyjones, warm	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-5, A-4	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML	*A-4	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ashly silt loam	*ML, GM	*A-4	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GC-GM, GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
772: Honeyjones, warm	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
772: Ahrs-----	<i>In</i>					<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	0	45-55	40-50	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	0	40-50	35-45	30-45
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	0	35-45	30-40	25-35
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	0	35-45	30-40	25-35
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	0	35-45	30-40	25-35
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	0	35-45	30-40	25-35
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	0	35-45	30-40	25-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
773: Honeyjones, dry	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
774: Pinecreek, moist	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-6	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-85	70-85	65-85	
	6-12	*Ashy silt loam	*ML	*A-4	0	0	70-85	65-85	60-80	
	12-19	*Gravelly ash silt loam	*GM	*A-4, A-2	0	0-18	40-65	40-60	35-55	
	19-24	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-18	40-65	40-60	35-55	
	24-30	*Very gravelly loam, extremely gravelly loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0	0-35	30-50	25-45	20-40	
30-70	*Extremely cobbly loam, extremely flaggy loam, extremely gravelly sandy loam	*GM, GP-GM, GC-GM	*A-1	0-32	13-53	15-40	10-40	10-35		
775: Pinecreek, moist	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-6	*Gravelly ash silt loam	*GM, MH	*A-4, A-2, A-5	0	0	45-65	40-65	40-60	
	6-12	*Gravelly ash silt loam	*GM, ML	*A-4, A-2	0	0	45-65	40-60	40-55	
	12-19	*Gravelly ash silt loam	*GM	*A-4, A-2	0	0-18	40-65	40-60	35-55	
	19-24	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-18	40-65	40-60	35-55	
	24-30	*Very gravelly loam, extremely gravelly loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0	0-35	30-50	25-45	20-40	
	30-70	*Extremely cobbly loam, extremely flaggy loam, extremely gravelly sandy loam	*GM, GP-GM, GC-GM	*A-1	0-32	13-53	15-40	10-40	10-35	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10	3-10	4	10	40	
					inches	inches				
776: Cassyhill-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	90-10
	1-7	*Very gravelly ashy silt loam	*GM			0	0-5	25-45	25-45	25-45
	7-11	*Very gravelly ashy loam, extremely cobbly loam, extremely cobbly ashy silt loam, very gravelly ashy silt loam	*GM			0-4	0-33	35-55	30-50	20-45
	11-14	*Extremely channery loam, extremely flaggy loam, extremely channery silt loam	*GP-GC, GC, GP-GM			0-11	0-58	15-40	10-35	10-35
	14-24	*Bedrock	---			---	---	---	---	---
777: Bouldercreek, warm-----	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-3	*Moderately decomposed plant material	*PT			0	0	100	100	60-10
	3-4	*Ashy silt loam	*ML, MH			0	0	80-90	75-85	70-80
	4-8	*Ashy silt loam	*ML, GM, MH			0	0	65-90	60-85	55-80
	8-17	*Ashy silt loam, gravelly ashy silt loam	*ML, MH, GM			0	0	65-90	60-85	55-80
	17-25	*Very gravelly loam, very cobbly sandy loam	*GM, GC-GM			0	10-45	45-70	40-65	30-50
	25-33	*Very gravelly loam, extremely cobbly loam, very cobbly sandy loam	*GM, GC-GM			0	25-65	45-70	40-60	30-50
	33-40	*Very gravelly sandy loam, extremely cobbly sandy loam	*GM, GW-GM, GC-GM			0	25-65	35-50	30-45	25-35
	40-55	*Very gravelly loamy sand, extremely cobbly loamy sand, extremely cobbly sandy loam	*GW-GM, GC-GM			0	25-65	30-50	25-45	15-25
	55-60	*Very cobbly loamy sand, extremely cobbly loamy sand, extremely cobbly sandy loam	*GW-GM, GC-GM			0	25-65	30-50	25-45	15-25

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
778: Cassyhill-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	90-100	
	1-7	*Very gravelly ash silt loam	*GM	*A-1, A-2	0	0-5	25-45	25-45	25-45	
	7-11	*Very gravelly ash loam, extremely cobbly ashy silt loam, very gravelly ash silt loam	*GM	*A-1, A-2	0-4	0-33	35-55	30-50	20-45	
	11-14	*Extremely channery loam, extremely flaggy loam, extremely channery silt loam	*GP-GC, GC, GP-GM	*A-1, A-2	0-11	0-58	15-40	10-35	10-35	
	14-24	*Bedrock	---	---	---	---	---	---	---	
Lotuspoint-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100	
	2-4	*Gravelly ash silt loam	*GM, MH	*A-2, A-5	0	0-10	50-70	45-65	40-60	
	4-10	*Stony ash silt loam, very cobbly ash silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	40-65	35-65	30-60	
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-55	25-50	20-45	
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-55	25-50	20-40	
26-36	*Bedrock	---	---	---	---	---	---	---		

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
	<i>In</i>					<i>Pct</i>	<i>Pct</i>			
779: Bouldercreek----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	0	75-90	70-85	60-80
	3-8	*Ashy silt loam, gravelly ashy silt loam	*ML, MH, GM	*A-4, A-5	0	0	0	55-90	50-85	45-70
	8-17	*Gravelly ashy silt loam, ashy silt loam	*GM, MH	*A-4, A-2, A-5	0	0	0	50-65	45-60	35-55
	17-33	*Extremely cobbly loam, extremely gravelly loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0	10-65	0	30-50	25-45	15-35
	33-43	*Extremely gravelly fine sandy loam, extremely cobbly fine sandy loam, extremely cobbly sandy loam	*GW-GM, GC-GM	*A-1, A-2	0	15-65	0	30-50	25-45	10-30
	43-60	*Extremely gravelly fine sandy loam, extremely cobbly fine sandy loam, very cobbly sandy loam	*GW-GM, GC-GM	*A-1, A-2	0	15-65	0	30-50	25-45	10-30
	60-64	*Extremely gravelly fine sandy loam, extremely cobbly fine sandy loam, extremely cobbly sandy loam	*GW-GM, GC-GM	*A-1, A-2	0	15-65	0	30-50	25-45	10-30

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
780: Ardenvoir-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10
	2-6	*Gravelly ash silt loam	*ML, CL, GM *GM, GC	*A-4	0	0	65-75	60-70	55-65	55-65
	6-11	*Gravelly ash silt loam, gravelly ash loam		*A-4, A-2	0	0	65-75	60-70	50-65	50-65
	11-19	*Gravelly loam, very cobbly loam, very gravelly silt loam, gravelly silt loam	*GM, GC	*A-4, A-2	0	0-30	55-75	50-70	40-65	40-65
	19-39	*Very cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0-30	20-60	45-65	40-60	35-55	35-55
	39-48	*Extremely cobbly loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-20	20-60	35-45	30-40	20-35	20-35
	48-58	*Bedrock	---	---	---	---	---	---	---	---
	Huckle-----	0-2	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
2-3		*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	60-10
3-4		*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-85	70-85
4-8		*Ashy silt loam, gravelly ash silt loam	*ML, MH	*A-4, A-5	0	0	75-100	75-100	70-90	70-90
8-19		*Gravelly ash silt loam, ash silt loam	*ML, MH, GM	*A-4, A-5	0	0	60-90	55-85	50-80	50-80
19-28		*Very cobbly silt loam, very gravelly loam, extremely cobbly loam	*GM, GC-GM	*A-4, A-1	0	25-65	40-70	35-65	30-60	30-60
28-38		*Extremely cobbly silt loam, very gravelly silt loam, very cobbly fine sandy loam, extremely cobbly loam	*GM, GC-GM	*A-2, A-4, A-1	0	10-60	35-65	30-60	20-55	20-55
38-47		*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam, extremely cobbly fine sandy loam	*GM, GW-GM, GC-GM	*A-1, A-2	0-15	20-65	35-65	30-60	20-55	20-55
47-57		*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
780: Saint Maries, dry-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-5	*Gravelly ash silt loam	*GM, GC-GM	*A-4	0	0	55-65	50-60	45-55
	5-9	*Gravelly ash silt loam	*GM, GC-GM	*A-4, A-2	0	0	50-60	45-55	40-50
	9-17	*Extremely cobbly ash silt loam, very cobbly ashy silt loam	*GM, GC-GM	*A-1	0	15-50	30-40	25-35	20-30
	17-24	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	30-60	35-45	30-40	25-35
	24-32	*Extremely cobbly silt loam, very gravelly silt loam, extremely cobbly loam	*GM, GP-GM, GC-GM	*A-1	0	35-55	25-40	20-35	15-30
	32-50	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1	0	45-75	30-40	25-35	20-30
	50-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1	0	30-55	20-40	15-35	10-30
781: Ahrs, moist-----	0-3	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	3-12	*Cobbly ash silt loam	*GM	*A-4	0-15	20-35	55-75	50-70	45-55
	12-22	*Very cobbly ash silt loam, cobbly ash silt loam, gravelly ash silt loam	*GM	*A-2, A-4	0-15	35-55	45-60	40-55	35-45
	22-35	*Very gravelly loam, very gravelly silt loam	*GM, GC-GM	*A-1, A-2	0-5	15-25	35-65	30-60	25-40
	35-48	*Extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0-15	15-35	30-50	25-45	20-35
	48-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GP-GM, GC-GM	*A-1, A-2	0-30	25-50	25-50	20-45	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
781: Honeyjones, warm	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
782: Ardenvoir, dry--	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-3	*Gravelly ash silt loam	*ML, CL, GM	*A-4	0	0	0	60-75	50-70	45-65
	3-11	*Gravelly ash silt loam, gravelly ash loam	*ML, CL, GM	*A-4	0	0	0	60-75	50-70	45-65
	11-18	*Very gravelly loam, very gravelly silt loam	*GM, GC	*A-2, A-1, A-4	0	10-40	45-65	40-60	35-55	
	18-32	*Extremely gravelly loam, very cobbly silt loam	*GM, GC	*A-2, A-1, A-4	0	25-55	45-65	40-60	30-50	
	32-41	*Extremely cobbly loam, extremely cobbly silt loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0-15	25-60	35-55	30-50	25-35	
	41-60	*Extremely stony loam, extremely cobbly sandy loam, extremely cobbly silt loam	*GM, GC-GM	*A-1	0-50	25-55	30-50	25-45	25-35	
	60-70	*Bedrock	---	---	---	---	---	---	---	---
Cassyskill-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	90-100
	1-7	*Very gravelly ash silt loam	*GM	*A-1, A-2	0	0-5	25-45	25-45	25-45	
	7-11	*Very gravelly ash loam, extremely cobbly ashy silt loam, very gravelly ash silt loam	*GM	*A-1, A-2	0-4	0-33	35-55	30-50	20-45	
	11-14	*Extremely channery loam, extremely flaggy loam, extremely channery silt loam	*GP-GC, GC, GP-GM	*A-1, A-2	0-11	0-58	15-40	10-35	10-35	
	14-24	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-			
			Unified	AASHTO	inches	3-10	4			
							10	10	40	
784: Pinecreek, moist	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-6	*Gravelly ashly silt loam	*GM, MH	*A-4, A-2, A-5	0	0	45-65	40-65	40-60	
	6-12	*Gravelly ashly silt loam	*GM, ML	*A-4, A-2	0	0	45-65	40-60	40-55	
	12-19	*Gravelly ashly silt loam	*GM	*A-4, A-2	0	0-18	40-65	40-60	35-55	
	19-24	*Gravelly ashly silt loam	*GM	*A-2, A-4	0	0-18	40-65	40-60	35-55	
	24-30	*Very gravelly loam, extremely gravelly	*GM, GC-GM	*A-1, A-2	0	0-35	30-50	25-45	20-40	
	30-70	*Extremely cobbly loam, extremely flaggy loam, extremely gravelly sandy loam	*GM, GP-GM, GC-GM	*A-1	0-32	13-53	15-40	10-40	10-35	
Lotuspoint-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-4	*Gravelly ashly silt loam	*GM, MH	*A-2, A-5	0	0-10	50-70	45-65	40-60	
	4-10	*Stony ashly silt loam, very cobbly ashly silt loam	*GM	*A-4, A-5, A-1	0-40	0-30	40-65	35-65	30-60	
	10-16	*Extremely stony silt loam, very cobbly silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-4	10-60	30-45	30-55	25-50	20-45	
	16-26	*Extremely stony loam, extremely stony silt loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	5-55	30-50	30-55	25-50	20-40	
	26-36	*Bedrock	---	---	---	---	---	---	---	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
791: Latour-----	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Gravelly medial silt loam, medial silt loam	*ML, MH, GM	*A-5, A-2	0	0-20	50-70	50-70	40-65
	3-14	*Very cobbly medial silt loam, very gravelly medial silt loam, gravelly medial silt loam	*GM, MH	*A-2, A-1, A-5	0-14	12-29	25-70	25-70	20-65
	14-40	*Extremely cobbly medial silt loam, very flaggy medial silt loam, very cobbly medial silt loam	*GM, MH	*A-2, A-5, A-1	8-25	42-56	25-65	25-65	20-60
800: Rock outcrop----	40-60	*Extremely stony sandy loam, very cobbly silt loam, extremely cobbly loam	*GC-GM, GC, GP-GM	*A-1, A-4	6-27	34-42	20-75	20-75	15-75
	0-60	*Bedrock	---	---	---	---	---	---	---
	0-60	*Gravel, cobbles	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3 3-10 10-30	*Ashy silt loam *Ashy silt loam *Silt loam, gravelly loam	*ML *CL-ML, ML *CL, CL-ML	*A-4 *A-4 *A-4	0 0 0	0-15	90-100 90-100 75-100	90-100 90-100 70-100	80-98 80-98 65-96
Urban land-----	30-60	*Silt loam, gravelly loam, silty clay loam	*CL, CL-ML	*A-6, A-4	0	0-15	75-100	70-100	65-96
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900: Water-----	---	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
901: Aquandic Endoaquepts----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-11	*Ashy silt loam	*CL-ML, ML, CL	*A-4	0	0	85-100	85-100	70-95
	11-40	*Silt loam, very fine sandy loam	*CL-ML, CL, ML	*A-4	0	0	85-100	85-100	75-96
	40-60	*Extremely gravelly loam, very cobbly fine sandy loam	*GC-GM, GP-GM	*A-1	0	6-31	15-35	15-30	10-30
Aquic Udifulvents----	0-8	*Silt loam	*CL-ML, ML, CL	*A-4	0	0	85-100	85-100	75-97
	8-22	*Gravelly silt loam, gravelly fine sandy loam	*GC-GM, GC, GM	*A-4, A-2	0	0-20	45-65	45-65	40-65
	22-60	*Extremely cobbly loamy coarse sand, extremely gravelly loamy sand	*GP-GM, GP-GC	*A-1	0	24-63	20-40	15-40	10-25

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
902: Ahrs-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	0	45-55	40-50	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	0	40-50	35-45	30-45
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	0	35-45	30-40	25-35
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	0	35-45	30-40	25-35
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	0	35-45	30-40	25-35
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	0	35-45	30-40	25-35
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	0	35-45	30-40	25-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
903: Ahrs-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	0	45-55	40-50	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	0	40-50	35-45	30-45
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	0	35-45	30-40	25-35
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	0	35-45	30-40	25-35
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	0	35-45	30-40	25-35
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	0	35-45	30-40	25-35
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	0	35-45	30-40	25-35
Pinecreek-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-10
	2-6	*Gravelly ash silt loam	*GM, MH	*A-4, A-2, A-5	0	0	0	45-65	40-65	40-60
	6-12	*Gravelly ash silt loam	*GM, ML	*A-4, A-2	0	0	0	45-65	40-60	40-55
	12-19	*Gravelly ash silt loam	*GM	*A-4, A-2	0	0-18	0	40-65	40-60	35-55
	19-24	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-18	0	40-65	40-60	35-55
	24-30	*Very gravelly loam, extremely gravelly loam, very cobbly loam	*GM, GC-GM	*A-1, A-2	0	0-35	0	30-50	25-45	20-40
	30-70	*Extremely cobbly loam, extremely flaggy loam, extremely gravelly sandy loam	*GM, GP-GM, GC-GM	*A-1	0-32	13-53	0	15-40	10-40	10-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
907: Honeyjones-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ashy silt loam	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
908: Honeyjones-----	<i>In</i>				<i>Pct</i>	<i>Pct</i>			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	75-90	70-85	65-80
	3-7	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	70-90	65-85	65-80
	7-19	*Ashy silt loam, gravelly ash	*ML, MH, GM	*A-4, A-5	0	0-30	60-90	55-85	50-80
	19-24	*Very gravelly silt loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-2, A-1	0	0-50	40-60	35-55	30-45
	24-35	*Extremely gravelly loam, extremely gravelly silt loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0	10-60	30-45	25-40	20-35
	35-47	*Extremely cobbly loam, extremely stony silt loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35
	47-60	*Extremely stony silt loam, extremely stony loam, extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM, GP-GM	*A-1, A-2	0-60	10-60	25-45	20-40	15-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments			Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	Pct	4	10	40
908: Ahrs-----	In					Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	0	100	100	60-100
	2-6	*Gravelly ash silt loam	*GM	*A-2, A-4	0	0-25	0	45-55	40-50	35-45
	6-14	*Very gravelly ash silt loam, cobbly ash silt loam, gravelly ashy silt loam	*GM	*A-2, A-1	0	0-25	0	40-50	35-45	30-45
	14-23	*Very gravelly ash silt loam, very cobbly ashy silt loam, extremely gravelly ashy silt loam	*GM	*A-1, A-2	0	0-50	0	35-45	30-40	25-35
	23-30	*Very cobbly loam, very cobbly silt loam, extremely gravelly silt loam	*GM, GC-GM	*A-1, A-2	0	10-60	0	35-45	30-40	25-35
	30-41	*Extremely cobbly loam, extremely gravelly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	35-70	0	35-45	30-40	25-35
	41-51	*Extremely cobbly silt loam, extremely cobbly loam	*GM, GC-GM	*A-1, A-2	0	55-80	0	35-45	30-40	25-35
	51-60	*Extremely cobbly loam, extremely cobbly silt loam	*GM, GC-GM	*A-1, A-2	0	45-70	0	35-45	30-40	25-35

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
913: Hobo-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-2	*Moderately decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	2-3	*Ashy silt loam	*ML, MH	*A-4, A-5	0	0	80-100	75-100	70-95	
	3-8	*Ashy silt loam	*ML	*A-4, A-5	0	0	80-100	75-100	70-95	
	8-18	*Ashy silt loam	*ML	*A-4, A-5	0	0	80-100	75-100	70-95	
	18-22	*Silt loam	*CL-ML, CL	*A-4	0	0	90-100	85-100	80-90	
	22-30	*Silt loam	*CL-ML, CL	*A-4	0	0	85-95	80-90	75-85	
	30-44	*Gravelly loam, gravelly silt loam, silt loam	*CL, GC-GM	*A-4	0	0	60-90	55-85	50-70	
	44-60	*Very gravelly loam, extremely gravelly loam, extremely gravelly silt loam	*GC-GM, GC	*A-2, A-1	0	0-15	35-55	30-50	25-45	
Acl: Arson-----	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-6	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	90-10	
	6-10	*Ashy silt loam	*ML	*A-4	0	0	90-100	90-100	85-10	
	10-22	*Silt loam	*CL	*A-6, A-4	0	0	85-95	85-95	75-95	
	22-33	*Gravelly silt loam, paragravelly silt loam, very gravelly silt loam	*CL, GC	*A-6, A-2	0	0	45-80	40-75	35-70	
	33-48	*Extremely gravelly silt loam, very gravelly silt loam, very gravelly loam	*GC, GC-GM	*A-2, A-6, A-1	0	0-5	20-50	15-50	15-50	
	48-60	*Bedrock	---	---	---	---	---	---	---	
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-10	
	1-8	*Ashy silt loam	*ML, MH	*A-5, A-4	0	0	100	95-100	90-10	
	8-19	*Silt loam	*CL	*A-6, A-4	0	0	100	95-100	90-10	
Carlinton-----	19-31	*Silt loam, silty clay loam	*CL	*A-6	0	0	100	95-100	90-10	
	31-39	*Silt loam	*CL	*A-6	0	0	100	95-100	90-10	
	39-60	*Silty clay loam, silt loam	*CL	*A-7, A-6	0	0	95-100	90-100	85-10	

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass - sieve number -			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
Ac2: Arson, dry-----	In				Pct	Pct				
	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-6	*Ashy silt loam								
	6-10	*Ashy silt loam	*ML			0	0	90-100	90-100	90-10
	10-22	*Silt loam	*ML			0	0	90-100	90-100	85-10
	22-33	*Gravelly silt loam, paragravelly silt loam, very gravelly silt loam	*CL			0	0	85-95	85-95	75-95
			*CL, GC			0	0	45-80	40-75	35-70
	33-48	*Extremely gravelly silt loam, very gravelly silt loam, very gravelly loam	*GC, GC-GM			0	0-5	20-50	15-50	15-50
Carlinton, dry--	48-60	*Bedrock	---	---	---	---	---	---	---	---
	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-8	*Ashy silt loam								
	8-19	*Silt loam	*ML, MH			0	0	100	95-100	90-10
	19-31	*Silt loam, silty clay loam	*CL			0	0	100	95-100	90-10
	31-39	*Silt loam	*CL			0	0	100	95-100	90-10
	39-60	*Silty clay loam, silt loam	*CL			0	0	95-100	90-100	85-10
An4: Arson, dry-----	0-1	*Slightly decomposed plant material	*PT			0	0	100	100	60-10
	1-6	*Ashy silt loam								
	6-10	*Ashy silt loam	*ML			0	0	90-100	90-100	90-10
	10-22	*Silt loam	*ML			0	0	90-100	90-100	85-10
	22-33	*Gravelly silt loam, paragravelly silt loam, very gravelly silt loam	*CL			0	0	85-95	85-95	75-95
			*CL, GC			0	0	45-80	40-75	35-70
	33-48	*Extremely gravelly silt loam, very gravelly silt loam, very gravelly loam	*GC, GC-GM			0	0-5	20-50	15-50	15-50
	48-60	*Bedrock	---	---	---	---	---	---	---	---

Table 28.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
An4: Minaloosa, dry--	In				Pct	Pct			
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
	1-5	*Ashy silt loam, gravelly ash loam	*ML	*A-4	0	0	85-100	70-95	60-95
	5-10	*Gravelly ash silt loam, gravelly ash loam	*ML, SM	*A-4	0	0	70-80	55-75	50-70
	10-32	*Very gravelly silt loam, very gravelly loam, very gravelly sandy loam	*SC, GC	*A-2	0	0-12	55-65	30-55	25-50
	32-41	*Extremely gravelly loam, extremely gravelly sandy loam, very cobbly loam	*GC-GM, GM, GC	*A-2, A-1	0	0-34	50-60	25-40	20-40
	41-60	*Extremely gravelly loam, extremely stony loam, very gravelly silt loam	*GC-GM, GP-GM, GC	*A-2, A-1	0-41	0-36	25-50	5-40	5-35
Rs2: Reggear, moist--	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	75-90
	1-4	*Ashy silt loam	*ML, MH	*A-5, A-4	0	0	95-100	95-100	90-100
	4-8	*Ashy silt loam	*ML	*A-4	0	0	95-100	95-100	90-100
	8-18	*Silt loam	*CL, CL-ML	*A-6, A-4	0	0	95-100	95-100	85-100
	18-31	*Silt loam	*CL	*A-6, A-4	0	0	85-100	85-100	80-100
	31-60	*Silty clay loam, silt loam	*CL, CH	*A-7, A-6	0	0	95-100	95-100	85-100
	0-1	*Slightly decomposed plant material	*PT	*A-8	0	0	100	100	60-100
Stewah-----	1-5	*Ashy silt loam	*ML, MH	*A-5, A-4	0	0	90-100	90-100	85-100
	5-10	*Ashy silt loam	*ML	*A-4	0	0	95-100	95-100	90-99
	10-16	*Silt loam, gravelly silt loam	*CL, CL-ML	*A-6, A-4	0	0	75-97	70-97	65-97
	16-25	*Gravelly silt loam, very gravelly silt loam, very paracobbly silt loam	*CL, GC-GM	*A-6, A-4	0	0-37	50-70	45-70	40-65
	25-60	*Extremely gravelly silt loam, extremely cobbly silt loam, very gravelly silt loam	*GC-GM, GC, GP-GC	*A-1, A-2	0	0-51	15-45	10-40	10-40
	60-70	*Bedrock	---	---	---	---	---	---	---

Table 29.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility gro erodibility index" apply only to the mineral or saturated organic surface layer. Absence of an data were not estimated.)

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Erosion	
							Organic matter	Kw
105: Aquic Udifluvents, protected-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-8	8-15	1.25-1.50	0.6-2	0.19-0.21	0.0-2.9	0.5-2.0	.49
	8-22	5-15	1.30-1.55	0.6-2	0.14-0.16	0.0-2.9	0.5-2.0	.32
Typic Fluvaquents, protected-----	22-60	2-10	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.1-0.5	.02
	0-9	5-12	1.20-1.40	0.6-2	0.12-0.20	0.0-2.9	1.0-3.0	.43
	9-27	5-12	1.30-1.50	0.6-2	0.12-0.16	0.0-2.9	0.3-1.0	.55
116: Thatuna-----	27-60	3-10	1.40-1.65	2-6	0.04-0.06	0.0-2.9	0.1-0.5	.05
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
Caldwell-----	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
118: Thatuna-----	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
Caldwell-----	0-4	15-22	1.05-1.25	0.6-2	0.19-0.21	3.0-5.9	4.0-8.0	.37
	4-10	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	3.0-7.0	.37
	10-16	15-27	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-6.0	.43
118: Thatuna-----	16-21	18-27	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.43
	21-30	18-27	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.49
	30-40	18-27	1.20-1.40	0.6-2	0.19-0.21	3.0-5.9	0.5-2.0	.49
118: Thatuna-----	40-52	18-35	1.25-1.50	0.6-2	0.19-0.21	3.0-5.9	0.5-1.5	.49
	52-60	18-35	1.25-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-1.0	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
118: Thatuna-----	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
118: Thatuna-----	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
118: Thatuna-----	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
118: Thatuna-----	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
118: Thatuna-----	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
118: Cald-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-7	15-22	1.05-1.20	0.6-2	0.19-0.21	3.0-5.9	4.0-8.0	.32
	7-13	15-25	1.05-1.25	0.6-2	0.19-0.21	3.0-5.9	3.0-7.0	.37
	13-17	10-25	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-6.0	.43
	17-25	6-27	1.15-1.40	2-6	0.19-0.21	3.0-5.9	1.0-3.5	.49
	25-40	20-35	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	0.5-1.5	.49
	40-48	20-35	1.25-1.55	0.2-0.6	0.18-0.20	3.0-5.9	0.3-1.0	.55
120: Iatahco-----	48-60	20-35	1.30-1.55	0.6-2	0.16-0.20	3.0-5.9	0.2-0.5	.43
	0-13	15-25	1.15-1.30	0.6-2	0.19-0.21	0.0-5.9	4.0-7.0	.32
	13-20	6-20	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.55
	20-26	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.5-1.5	.43
	26-42	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.3-1.0	.49
	42-51	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.2-0.5	.49
	51-62	20-30	1.30-1.50	0.6-2	0.17-0.20	0.0-5.9	0.2-0.5	.55
121: Iatahco-----	0-13	15-25	1.15-1.30	0.6-2	0.19-0.21	0.0-5.9	4.0-7.0	.32
	13-20	6-20	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.55
	20-26	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.5-1.5	.43
	26-42	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.3-1.0	.49
	42-51	25-35	1.30-1.50	0.6-2	0.17-0.19	3.0-5.9	0.2-0.5	.49
	51-62	20-30	1.30-1.50	0.6-2	0.17-0.20	0.0-5.9	0.2-0.5	.55
	0-8	15-25	0.90-1.00	0.6-2	0.20-0.23	0.0-2.9	2.0-4.0	.43
Lovell-----	8-18	15-24	0.95-1.15	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	18-22	18-25	1.25-1.50	0.2-0.6	0.17-0.19	0.0-2.9	0.5-1.5	.55
	22-34	20-30	1.30-1.60	0.6-2	0.16-0.18	0.0-2.9	0.3-0.8	.55
	34-51	20-30	1.30-1.60	0.6-2	0.15-0.17	0.0-2.9	0.2-0.5	.55
	51-60	16-25	1.30-1.60	0.6-2	0.15-0.17	0.0-2.9	0.2-0.4	.55
	0-8	15-25	0.90-1.00	0.6-2	0.20-0.23	0.0-2.9	2.0-4.0	.43
	8-18	15-24	0.95-1.15	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
122: Tilma-----	14-20	15-18	1.25-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	20-23	10-18	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	0.3-0.8	.64
	23-30	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	30-34	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	34-42	32-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	42-60	18-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	0.3-0.5	.55
	0-8	15-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.28

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
122: Latah-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-10	14-22	1.05-1.25	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.43
	10-14	14-22	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49
	14-19	12-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.64
	19-22	8-12	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.5-1.5	.64
	22-31	32-40	1.30-1.50	0.2-0.6	0.15-0.19	3.0-5.9	0.3-1.0	.43
	31-38	35-45	1.30-1.50	0.2-0.6	0.15-0.19	6.0-8.9	0.3-0.8	.43
124: Caldwell-----	38-60	30-45	1.30-1.50	0.2-0.6	0.15-0.19	6.0-8.9	0.3-0.5	.43
	0-4	15-22	1.05-1.25	0.6-2	0.19-0.21	3.0-5.9	4.0-8.0	.37
	4-10	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	3.0-7.0	.43
	10-16	15-27	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-6.0	.43
	16-21	18-27	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.43
	21-30	18-27	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	30-40	18-27	1.20-1.40	0.6-2	0.19-0.21	3.0-5.9	0.5-2.0	.49
Caid-----	40-52	18-35	1.25-1.50	0.6-2	0.19-0.21	3.0-5.9	0.5-1.5	.49
	52-60	18-35	1.25-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-1.0	.49
	0-7	15-22	1.05-1.20	0.6-2	0.19-0.21	3.0-5.9	4.0-8.0	.32
	7-13	15-25	1.05-1.25	0.6-2	0.19-0.21	3.0-5.9	3.0-7.0	.37
	13-17	10-25	1.15-1.35	0.2-0.6	0.19-0.21	3.0-5.9	2.0-6.0	.43
	17-25	6-27	1.15-1.40	2-6	0.19-0.21	3.0-5.9	1.0-3.5	.49
	25-40	20-35	1.20-1.40	0.6-2	0.18-0.20	3.0-5.9	0.5-1.5	.49
125: Lovell-----	40-48	20-35	1.25-1.55	0.2-0.6	0.18-0.20	3.0-5.9	0.3-1.0	.55
	48-60	20-35	1.30-1.55	0.6-2	0.16-0.20	3.0-5.9	0.2-0.5	.43
	0-8	15-25	0.90-1.00	0.6-2	0.20-0.23	0.0-2.9	2.0-4.0	.43
	8-18	15-24	0.95-1.15	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	18-22	18-25	1.25-1.50	0.2-0.6	0.17-0.19	0.0-2.9	0.5-1.5	.55
	22-34	20-30	1.30-1.60	0.6-2	0.16-0.18	0.0-2.9	0.3-0.8	.55
	34-51	20-30	1.30-1.60	0.6-2	0.15-0.17	0.0-2.9	0.2-0.5	.55
Porrett-----	51-60	16-25	1.30-1.60	0.6-2	0.15-0.17	0.0-2.9	0.2-0.4	.55
	0-3	15-25	0.90-1.00	0.2-0.6	0.20-0.23	0.0-2.9	2.0-5.0	.32
	3-14	10-20	0.90-1.00	0.2-0.6	0.19-0.21	0.0-2.9	1.0-2.0	.55
	14-21	10-20	1.15-1.35	0.6-2	0.17-0.19	0.0-2.9	0.5-1.5	.55
	21-60	23-35	1.30-1.60	0.6-2	0.14-0.16	0.0-5.9	0.2-0.8	.43
Aquadic Endoaquepts--	0-11	8-15	0.90-1.10	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.49
	11-40	10-17	1.25-1.50	0.6-2	0.14-0.18	0.0-2.9	0.5-2.0	.49
	40-60	5-12	1.40-1.60	0.6-2	0.03-0.06	0.0-2.9	0.1-0.5	.10

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
130: Porrett-----	0-3 3-14 14-21 21-60	15-25 10-20 10-20 23-35	0.90-1.00 0.90-1.00 1.15-1.35 1.30-1.60	0.2-0.6 0.2-0.6 0.6-2 0.6-2	0.20-0.23 0.19-0.21 0.17-0.19 0.14-0.16	0.0-2.9 0.0-2.9 0.0-2.9 0.0-5.9	2.0-5.0 1.0-2.0 0.5-1.5 0.2-0.8	.32 .55 .55 .43
136: Lovell-----	0-8 8-18 18-22 22-34 34-51 51-60	15-25 15-24 18-25 20-30 20-30 16-25	0.90-1.00 0.95-1.15 1.25-1.50 1.30-1.60 1.30-1.60 1.30-1.60	0.6-2 0.6-2 0.2-0.6 0.6-2 0.6-2 0.6-2	0.20-0.23 0.19-0.21 0.17-0.19 0.16-0.18 0.15-0.17 0.15-0.17	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	2.0-4.0 1.0-3.0 0.5-1.5 0.3-0.8 0.2-0.5 0.2-0.4	.43 .49 .55 .55 .55 .55
Porrett-----	0-3 3-14 14-21 21-60	15-25 10-20 10-20 23-35	0.90-1.00 0.90-1.00 1.15-1.35 1.30-1.60	0.2-0.6 0.2-0.6 0.6-2 0.6-2	0.20-0.23 0.19-0.21 0.17-0.19 0.14-0.16	0.0-2.9 0.0-2.9 0.0-2.9 0.0-5.9	2.0-5.0 1.0-2.0 0.5-1.5 0.2-0.8	.32 .55 .55 .43
141: Miesen-----	0-12 12-32 32-60	8-17 8-17 5-15	1.05-1.20 1.25-1.45 1.30-1.55	0.6-2 0.6-2 0.6-2	0.20-0.22 0.16-0.20 0.12-0.18	0.0-2.9 0.0-2.9 0.0-2.9	3.5-8.5 2.0-4.0 0.5-1.5	.37 .49 .55
142: Miesen-----	0-12 12-32 32-60	8-17 8-17 5-15	1.05-1.20 1.25-1.45 1.30-1.55	0.6-2 0.6-2 0.6-2	0.20-0.22 0.16-0.20 0.12-0.18	0.0-2.9 0.0-2.9 0.0-2.9	3.5-8.5 2.0-4.0 0.5-1.5	.37 .49 .55
Ramsdell-----	0-8 8-35 35-60	6-17 6-17 5-15	0.90-1.05 1.30-1.60 1.50-1.60	0.6-2 0.6-2 0.6-2	0.21-0.23 0.14-0.18 0.12-0.16	0.0-2.9 0.0-2.9 0.0-2.9	3.0-6.0 1.0-4.0 0.1-0.5	.37 .49 .64
143: Miesen, protected, drained-----	0-12 12-32 32-60	8-17 8-17 5-15	1.05-1.20 1.25-1.45 1.30-1.55	0.6-2 0.6-2 0.6-2	0.20-0.22 0.16-0.20 0.12-0.18	0.0-2.9 0.0-2.9 0.0-2.9	3.5-8.5 2.0-4.0 0.5-1.5	.37 .49 .55
144: Miesen, protected, drained-----	0-12 12-32 32-60	8-17 8-17 5-15	1.05-1.20 1.25-1.45 1.30-1.55	0.6-2 0.6-2 0.6-2	0.20-0.22 0.16-0.20 0.12-0.18	0.0-2.9 0.0-2.9 0.0-2.9	3.5-8.5 2.0-4.0 0.5-1.5	.37 .49 .55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
144: Ramsdell, protected, drained-----	0-8 8-35 35-60	6-17 6-17 5-15	0.90-1.05 1.30-1.60 1.50-1.60	0.6-2 0.6-2 0.6-2	0.21-0.23 0.15-0.19 0.12-0.16	0.0-2.9 0.0-2.9 0.0-2.9	3.0-6.0 1.0-4.0 0.1-0.5	.37 .49 .64
145: Bellslake, protected, drained-----	0-5 5-11 11-23 23-32 32-40 40-47 47-55 55-62	8-12 8-12 8-15 8-18 8-18 8-15 10-30 10-30	0.85-1.00 0.90-1.10 1.20-1.50 1.30-1.50 1.30-1.50 1.00-1.30 0.40-0.60 0.40-0.60	0.6-2 0.6-2 0.6-2 0.6-2 0.6-2 0.6-2 0.6-2 0.6-2	0.20-0.22 0.20-0.22 0.18-0.21 0.18-0.21 0.19-0.21 0.19-0.21 0.25-0.35 0.25-0.35	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 --- ---	4.0-6.0 4.0-6.0 1.0-3.0 1.0-3.0 2.0-6.0 2.0-20 40-80 40-80	.37 .43 .55 .49 .43 --- --- ---
150: Pywell, protected, drained-----	0-16 16-65	10-35 10-35	0.20-0.40 0.20-0.40	0.6-2 0.6-2	0.22-0.30 0.22-0.30	---	40-80 40-80	--- ---
155: Ramsdell-----	0-8 8-35 35-60	6-17 6-17 5-15	0.90-1.05 1.30-1.60 1.50-1.60	0.6-2 0.6-2 0.6-2	0.21-0.23 0.14-0.18 0.12-0.16	0.0-2.9 0.0-2.9 0.0-2.9	3.0-6.0 1.0-4.0 0.1-0.5	.37 .49 .64
156: Ramsdell, protected, drained-----	0-8 8-35 35-60	6-17 6-17 5-15	0.90-1.05 1.30-1.60 1.50-1.60	0.6-2 0.6-2 0.6-2	0.21-0.23 0.15-0.19 0.12-0.16	0.0-2.9 0.0-2.9 0.0-2.9	3.0-6.0 1.0-4.0 0.1-0.5	.37 .49 .64
157: Ramsdell, protected, drained-----	0-8 8-35 35-60	6-17 6-17 5-15	0.90-1.05 1.30-1.60 1.50-1.60	0.6-2 0.6-2 0.6-2	0.21-0.23 0.15-0.19 0.12-0.16	0.0-2.9 0.0-2.9 0.0-2.9	3.0-6.0 1.0-4.0 0.1-0.5	.37 .49 .64
Devoignes, protected, drained-----	0-9 9-24 24-60	12-24 18-35 26-38	0.95-1.10 0.60-1.20 1.30-1.60	0.6-2 0.6-2 0.6-2	0.20-0.22 0.25-0.35 0.16-0.20	0.0-2.9 3.0-5.9 3.0-5.9	8.0-13 10-40 1.0-5.0	.32 --- .37

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
								Kw
158: Devoignes-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-9	12-24	0.95-1.10	0.6-2	0.20-0.22	0.0-2.9	8.0-13	.32
	9-24	18-35	0.60-1.20	0.6-2	0.25-0.35	3.0-5.9	10-40	---
	24-60	26-38	1.30-1.60	0.6-2	0.16-0.20	3.0-5.9	1.0-5.0	.37
Pywell-----	0-16	10-35	0.20-0.40	0.6-2	0.22-0.30	---	40-80	---
	16-65	10-35	0.20-0.40	0.6-2	0.22-0.30	---	40-80	---
200: Blinn, stony surface--	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	8-15	1.00-1.20	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.32
	6-12	10-20	1.00-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-3.0	.24
	12-24	12-20	1.40-1.55	0.6-2	0.12-0.14	0.0-2.9	0.5-1.5	.20
	24-39	10-20	1.40-1.55	0.6-2	0.06-0.09	0.0-2.9	0.3-0.8	.15
	39-40	---	---	---	---	---	---	---
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	8-15	1.00-1.20	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.32
201: Blinn, stony surface--	6-12	10-20	1.00-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-3.0	.24
	12-24	12-20	1.40-1.55	0.6-2	0.12-0.14	0.0-2.9	0.5-1.5	.20
	24-39	10-20	1.40-1.55	0.6-2	0.06-0.09	0.0-2.9	0.3-0.8	.15
	39-40	---	---	---	---	---	---	---
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	8-15	1.00-1.20	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.32
	6-12	10-20	1.00-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-3.0	.24
	12-24	12-20	1.40-1.55	0.6-2	0.12-0.14	0.0-2.9	0.5-1.5	.20
	24-39	10-20	1.40-1.55	0.6-2	0.06-0.09	0.0-2.9	0.3-0.8	.15
202: Blinn, stony surface--	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	8-15	1.00-1.20	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.32
	6-12	10-20	1.00-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-3.0	.24
Bobbitt, stony surface	12-24	12-20	1.40-1.55	0.6-2	0.12-0.14	0.0-2.9	0.5-1.5	.20
	24-39	10-20	1.40-1.55	0.6-2	0.06-0.09	0.0-2.9	0.3-0.8	.15
	39-40	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-9	10-20	1.15-1.35	0.6-2	0.14-0.16	0.0-2.9	3.0-7.0	.17
23-33	9-23	18-35	1.55-1.65	0.6-2	0.09-0.11	0.0-2.9	1.2-1.6	.10
	23-33	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
210: Agatha, stony surface	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-7	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-6.0	.32
	7-11	12-20	1.00-1.20	0.6-2	0.15-0.17	0.0-2.9	2.0-4.0	.28
	11-20	18-25	1.30-1.50	0.6-2	0.12-0.14	0.0-2.9	1.0-3.0	.20
	20-32	18-25	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.8-1.5	.17
	32-38	18-30	1.35-1.55	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.15
	38-43	18-30	1.40-1.60	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.10
	43-53	---	---	---	---	---	---	---
212: Agatha, stony surface	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-7	10-18	1.00-1.20	0.6-2	0.15-0.17	0.0-2.9	3.0-6.0	.20
	7-11	12-20	1.00-1.20	0.6-2	0.15-0.17	0.0-2.9	2.0-4.0	.28
	11-20	18-25	1.30-1.50	0.6-2	0.12-0.14	0.0-2.9	1.0-3.0	.20
	20-32	18-25	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.8-1.5	.17
	32-38	18-30	1.35-1.55	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.15
	38-43	18-30	1.40-1.60	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.10
	43-53	---	---	---	---	---	---	---
230: Lacy, stony surface---	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-20	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.24
	3-10	10-20	1.30-1.50	0.6-2	0.13-0.15	0.0-2.9	2.0-6.0	.24
	10-14	18-25	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	1.0-2.0	.10
	14-17	20-30	1.45-1.60	0.6-2	0.04-0.06	0.0-2.9	0.5-1.5	.05
	17-27	---	---	---	---	---	---	---
	0-60	---	---	---	---	---	---	---
231: Lacy, very stony surface-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	10-20	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	4.0-8.0	.15
	2-4	10-20	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	2.0-6.0	.17
	4-8	11-20	1.45-1.55	0.6-2	0.07-0.09	0.0-2.9	1.0-5.0	.10
	8-16	18-28	1.45-1.60	0.6-2	0.04-0.07	0.0-2.9	1.0-2.0	.10
	16-19	25-30	1.45-1.60	0.6-2	0.04-0.07	0.0-2.9	0.5-1.5	.05
	19-29	---	---	---	---	---	---	---
	0-60	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
232: Lacy, stony surface---	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-20	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.24
	3-10	10-20	1.30-1.50	0.6-2	0.13-0.15	0.0-2.9	2.0-6.0	.24
	10-14	18-25	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	1.0-2.0	.10
	14-17	20-30	1.45-1.60	0.6-2	0.04-0.06	0.0-2.9	0.5-1.5	.05
	17-27	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
233: Lacy, very stony surface-----	2-9	10-20	1.15-1.35	0.6-2	0.14-0.16	0.0-2.9	3.0-7.0	.17
	9-23	18-35	1.55-1.65	0.6-2	0.09-0.11	0.0-2.9	1.2-1.6	.10
	23-33	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	10-20	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	4.0-8.0	.15
	2-4	10-20	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	2.0-6.0	.17
	4-8	11-20	1.45-1.55	0.6-2	0.07-0.09	0.0-2.9	1.0-5.0	.10
	8-16	18-28	1.45-1.60	0.6-2	0.04-0.07	0.0-2.9	1.0-2.0	.10
	16-19	25-30	1.45-1.60	0.6-2	0.04-0.07	0.0-2.9	0.5-1.5	.05
	19-29	---	---	---	---	---	---	---
Bobbitt, very stony surface-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	10-20	1.15-1.35	0.6-2	0.13-0.15	0.0-2.9	3.0-7.0	.15
	4-11	10-20	1.15-1.35	0.6-2	0.13-0.15	0.0-2.9	2.0-4.0	.20
	11-15	18-25	1.40-1.60	0.6-2	0.09-0.11	0.0-2.9	1.3-1.8	.10
	15-27	18-30	1.40-1.60	0.6-2	0.09-0.12	0.0-2.9	0.5-1.3	.10
	27-33	18-30	1.40-1.60	0.6-2	0.05-0.08	0.0-2.9	0.5-1.3	.10
	33-43	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
250: Dorb, warm, stony surface-----	2-4	10-20	1.15-1.35	0.6-2	0.13-0.15	0.0-2.9	3.0-7.0	.15
	4-11	10-20	1.15-1.35	0.6-2	0.13-0.15	0.0-2.9	2.0-4.0	.20
	11-15	18-25	1.40-1.60	0.6-2	0.09-0.11	0.0-2.9	1.3-1.8	.10
	15-27	18-30	1.40-1.60	0.6-2	0.09-0.12	0.0-2.9	0.5-1.3	.10
	27-33	18-30	1.40-1.60	0.6-2	0.05-0.08	0.0-2.9	0.5-1.3	.10
	33-43	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-10	0.65-0.85	0.6-2	0.21-0.23	0.0-2.9	3.0-6.0	.24
	3-20	3-10	0.65-0.85	0.6-2	0.20-0.22	0.0-2.9	1.0-3.5	.15

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
255: Shayhill, stony surface-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.37
	3-10	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.48
	10-19	10-18	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.29
	19-28	10-18	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.8-1.2	.15
	28-48	18-28	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	0.3-0.8	.05
	48-55	15-25	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	55-64	15-20	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.10
256: Shayhill, stony surface-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-7.0	.20
	3-10	10-18	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	1.0-3.0	.28
	10-19	10-18	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28
	19-28	10-18	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.8-1.2	.15
	28-48	18-28	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	0.3-0.8	.05
	48-55	15-25	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	55-64	15-20	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.10
257: Shayhill, dry, stony surface-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	10-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-7.0	.20
	4-11	10-18	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	1.0-3.0	.28
	11-19	10-18	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.24
	19-64	18-28	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	0.3-0.8	.10
260: Sedow-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	10-20	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.32
	6-10	15-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	10-16	18-26	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	16-24	24-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	1.0-1.5	.43
	24-32	28-30	1.40-1.50	0.6-2	0.13-0.15	3.0-5.9	0.5-1.5	.17
	32-45	24-30	1.40-1.50	0.6-2	0.09-0.11	3.0-5.9	0.5-1.0	.15
	45-55	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
261: sly, dry-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.43
	5-9	10-20	1.10-1.20	0.6-2	0.18-0.21	0.0-2.9	1.0-3.0	.49
	9-29	18-27	1.25-1.60	0.6-2	0.18-0.21	0.0-5.9	0.5-1.0	.55
	29-60	22-32	1.30-1.65	0.6-2	0.14-0.21	0.0-5.9	0.2-0.5	.32
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.37
Shayhill, dry-----	3-11	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	11-19	18-25	1.40-1.60	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.20
	19-42	18-28	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	0.3-0.8	.10
	42-55	15-25	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	10-20	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.32
	6-10	15-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	10-16	18-26	1.30-1.50	0.6-2	0.19-0.21	0.0-2.0	1.0-2.0	.49
	16-24	24-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	1.0-1.5	.43
262: seddown-----	24-32	28-30	1.40-1.50	0.6-2	0.13-0.15	3.0-5.9	0.5-1.5	.17
	32-45	24-30	1.40-1.50	0.6-2	0.09-0.11	3.0-5.9	0.5-1.0	.15
	45-55	---	---	---	---	---	---	---
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	10-20	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.32
	6-10	15-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	10-16	18-26	1.30-1.50	0.6-2	0.19-0.21	0.0-2.0	1.0-2.0	.49
	16-24	24-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	1.0-1.5	.43
	24-32	28-30	1.40-1.50	0.6-2	0.13-0.15	3.0-5.9	0.5-1.5	.17
sly, dry-----	32-45	24-30	1.40-1.50	0.6-2	0.09-0.11	3.0-5.9	0.5-1.0	.15
	45-55	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.43
	5-9	10-20	1.10-1.20	0.6-2	0.18-0.21	0.0-2.9	1.0-3.0	.49
	9-29	18-27	1.25-1.60	0.6-2	0.18-0.21	0.0-5.9	0.5-1.0	.55
	29-60	22-32	1.30-1.65	0.6-2	0.14-0.21	0.0-5.9	0.2-0.5	.32
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
300: Taney-----	2-4	15-23	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	4-15	15-23	1.20-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-4.0	.43
	15-22	16-21	1.30-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.55
	22-29	17-23	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	29-31	10-20	1.45-1.55	0.6-2	0.19-0.21	0.0-2.9	0.3-1.0	.64
	31-53	24-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	53-60	24-38	1.50-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	15-23	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
301: Taney-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	15-23	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	4-15	15-23	1.20-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-4.0	.43
	15-22	16-21	1.30-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.55
	22-29	17-23	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	29-31	10-20	1.45-1.55	0.6-2	0.19-0.21	0.0-2.9	0.3-1.0	.64
	31-53	24-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	53-60	24-38	1.50-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
303: Carlinton-----	0-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	5-10	10-18	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	10-14	11-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	14-20	12-21	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.64
	20-23	9-15	1.40-1.55	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	23-30	20-32	1.50-1.65	0.6-2	0.14-0.18	0.0-2.9	0.3-0.8	.55
	30-53	24-36	1.60-1.70	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.49
	53-60	24-34	1.50-1.65	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	0-6	10-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	6-15	10-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
Benewah-----	15-18	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.4-0.8	.64
	18-23	24-30	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.3-0.6	.49
	23-34	20-35	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.3-0.5	.49
	34-60	20-38	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.2-0.4	.49
	0-6	10-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	6-15	10-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	15-18	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.4-0.8	.64
	18-23	24-30	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.3-0.6	.49
	23-34	20-35	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.3-0.5	.49
	34-60	20-38	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.2-0.4	.49
304: Benewah-----	0-6	10-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	6-15	10-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	15-18	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.4-0.8	.64
	18-23	24-30	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.3-0.6	.49
	23-34	20-35	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.3-0.5	.49
	34-60	20-38	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.2-0.4	.49
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	10-17	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	4-9	11-17	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.43
Santa-----	9-15	12-18	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	15-34	8-15	1.40-1.55	0.6-2	0.18-0.20	0.0-2.9	0.5-1.0	.64
	34-44	20-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.55
	44-60	24-34	1.55-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
310: Santa-----	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	10-17	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	4-9	11-17	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.43
	9-15	12-18	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	15-34	8-15	1.40-1.55	0.6-2	0.18-0.20	0.0-2.9	0.5-1.0	.64
	34-44	20-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.55
	44-60	24-34	1.55-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.49
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
311: Santa-----	2-4	10-17	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	4-9	11-17	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.43
	9-15	12-18	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	15-34	8-15	1.40-1.55	0.6-2	0.18-0.20	0.0-2.9	0.5-1.0	.64
	34-44	20-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.55
	44-60	24-34	1.55-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.49
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	5-10	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49
	4-9	8-13	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
314: Sharptop-----	9-17	10-16	1.30-1.50	0.6-2	0.15-0.19	0.0-2.9	0.5-2.0	.55
	17-27	16-22	1.40-1.60	0.6-2	0.10-0.15	0.0-2.9	0.3-1.0	.55
	27-42	17-27	1.50-1.70	0.6-2	0.05-0.15	0.0-2.9	0.1-0.5	.55
	42-49	18-30	1.50-1.70	0.6-2	0.05-0.10	0.0-2.9	0.1-0.5	.55
	49-59	---	---	---	---	---	---	---
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	10-17	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	4-9	11-17	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.43
	9-15	12-18	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
315: Setters-----	15-34	8-15	1.40-1.55	0.6-2	0.18-0.20	0.0-2.9	0.5-1.0	.64
	34-44	20-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.55
	44-60	24-34	1.55-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.49
	0-4	16-24	1.20-1.30	0.2-0.6	0.18-0.20	0.0-2.9	3.0-5.0	.37
	4-15	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-2.9	1.5-4.5	.43
	15-19	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.5-1.5	.55
	19-22	12-20	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.3-0.6	.55
	22-60	37-48	1.40-1.60	0.06-0.2	0.13-0.15	6.0-8.9	0.1-0.4	.32
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
316: Setters-----	0-4	16-24	1.20-1.30	0.2-0.6	0.18-0.20	0.0-2.9	3.0-5.0	.37
	4-15	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-2.9	1.5-4.5	.43
	15-19	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.5-1.5	.55
	19-22	12-20	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.3-0.6	.55
	22-60	37-48	1.40-1.60	0.06-0.2	0.13-0.15	6.0-8.9	0.1-0.4	.32
Taney-----	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	15-23	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	4-15	15-23	1.20-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-4.0	.43
	15-22	16-21	1.30-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.55
	22-29	17-23	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
	29-31	10-20	1.45-1.55	0.6-2	0.19-0.21	0.0-2.9	0.3-1.0	.64
	31-53	24-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	53-60	24-38	1.50-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
320: Reggear-----	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	5-13	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	13-24	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.64
	24-28	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	28-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55
321: Reggear, moist-----	0-2	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	5-9	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	9-14	12-15	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.64
	14-22	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.55
	22-39	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	39-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55
322: Reggear, moist-----	0-2	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	5-9	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	9-14	12-15	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.64
	14-22	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.55
	22-39	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	39-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
322: Sly-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.43
	5-9	10-20	1.10-1.20	0.6-2	0.18-0.21	0.0-2.9	1.0-3.0	.49
	9-29	18-27	1.25-1.60	0.6-2	0.18-0.21	0.0-5.9	0.5-1.0	.55
	29-60	22-32	1.30-1.65	0.6-2	0.14-0.21	0.0-5.9	0.2-0.5	.32
323: Bechtel-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	4-9	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	9-17	15-20	1.45-1.60	0.6-2	0.16-0.19	0.0-2.9	0.4-0.8	.49
	17-26	15-25	1.45-1.60	0.6-2	0.16-0.19	0.0-2.9	0.3-0.7	.49
	26-35	18-25	1.45-1.60	0.6-2	0.09-0.14	0.0-2.9	0.2-0.6	.17
	35-56	10-23	1.45-1.65	0.6-2	0.05-0.07	0.0-2.9	0.1-0.3	.10
	56-66	---	---	---	---	---	---	---
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
325: Reggear-----	5-13	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	13-24	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.64
	24-28	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	28-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	5-13	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	13-24	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.64
	24-28	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	28-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
325: Sharptop, basalt substratum-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	6-11	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	4-9	7-13	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	9-12	8-16	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.5-2.0	.64
	12-19	10-16	1.40-1.60	0.6-2	0.16-0.20	0.0-2.9	0.5-2.0	.55
	19-27	16-27	1.40-1.60	0.6-2	0.16-0.20	0.0-2.9	0.3-1.0	.55
	27-41	12-17	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.1-0.5	.55
	41-47	12-17	1.40-1.60	0.6-2	0.07-0.11	0.0-2.9	0.1-0.5	.55
	47-57	---	---	---	---	---	---	---
326: Reggear-----	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	12-16	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.37
	5-13	12-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	13-24	13-23	1.40-1.60	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.64
	24-28	22-26	1.50-1.70	0.6-2	0.03-0.10	0.0-2.9	0.3-0.5	.55
	28-60	22-35	1.65-1.75	0.6-2	0.02-0.03	0.0-2.9	0.3-0.5	.55
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	10-20	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.32
	6-10	15-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	10-16	18-26	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
330: Carlinton-----	16-24	24-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	1.0-1.5	.43
	24-32	28-30	1.40-1.50	0.6-2	0.13-0.15	3.0-5.9	0.5-1.5	.17
	32-45	24-30	1.40-1.50	0.6-2	0.09-0.11	3.0-5.9	0.5-1.0	.15
	45-55	---	---	---	---	---	---	---
	0-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	5-10	10-18	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	10-14	11-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	14-20	12-21	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.64
	20-23	9-15	1.40-1.55	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	23-30	20-32	1.50-1.65	0.6-2	0.14-0.18	0.0-2.9	0.3-0.8	.55
	30-53	24-36	1.60-1.70	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.49
	53-60	24-34	1.50-1.65	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
330: Carlinton, dry-----	0-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	5-10	10-18	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	10-14	11-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	14-20	12-21	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.64
	20-23	9-15	1.40-1.55	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	23-30	20-32	1.50-1.65	0.6-2	0.14-0.18	0.0-2.9	0.3-0.8	.55
	30-53	24-36	1.60-1.70	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.49
	53-60	24-34	1.50-1.65	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	0-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	5-10	10-18	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
335: Carlinton, dry-----	10-14	11-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	14-20	12-21	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.64
	20-23	9-15	1.40-1.55	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	23-30	20-32	1.50-1.65	0.6-2	0.14-0.18	0.0-2.9	0.3-0.8	.55
	30-53	24-36	1.60-1.70	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.49
	53-60	24-34	1.50-1.65	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	0-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	5-10	10-18	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.43
	10-14	11-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	14-20	12-21	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.64
336: Carlinton, dry-----	20-23	9-15	1.40-1.55	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	23-30	20-32	1.50-1.65	0.6-2	0.14-0.18	0.0-2.9	0.3-0.8	.55
	30-53	24-36	1.60-1.70	0.6-2	0.02-0.03	0.0-2.9	0.3-0.8	.49
	53-60	24-34	1.50-1.65	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	0-1	5-15	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	5-15	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-4	15-23	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	4.0-6.0	.32
	4-15	15-23	1.20-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-4.0	.43
	15-22	16-21	1.30-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.55
	22-29	17-23	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.8-1.3	.55
Taney-----	29-31	10-20	1.45-1.55	0.6-2	0.19-0.21	0.0-2.9	0.3-1.0	.64
	31-53	24-34	1.60-1.75	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	24-38	24-38	1.50-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55
	53-60	24-38	1.50-1.70	0.6-2	0.02-0.03	0.0-2.9	0.1-0.5	.55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
340: Arson-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.32
	5-9	12-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	9-15	17-23	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.43
	15-38	18-26	1.45-1.65	0.6-2	0.14-0.16	0.0-2.9	0.3-1.0	.43
	38-43	18-26	1.45-1.65	0.6-2	0.07-0.10	0.0-2.9	0.2-0.6	.15
	43-57	16-26	1.50-1.70	0.6-2	0.06-0.10	0.0-2.9	0.2-0.5	.20
	57-67	---	---	---	---	---	---	---
Lotuspoint-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
341: Sinkler-----	0-0.5	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	0.5-1	1-10	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	1-6	9-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49
	6-12	11-17	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	12-20	15-20	1.30-1.50	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.55
	20-28	18-24	1.40-1.50	0.6-2	0.16-0.18	0.0-2.9	0.3-1.0	.55
	28-38	20-26	1.40-1.50	0.6-2	0.15-0.17	0.0-2.9	0.1-0.5	.55
	38-51	24-33	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.1-0.5	.49
	51-60	26-37	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.1-0.5	.43
Arson-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.32
	5-9	12-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	9-15	17-23	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.49
	15-38	18-26	1.45-1.65	0.6-2	0.14-0.16	0.0-2.9	0.3-1.0	.43
	38-43	18-26	1.45-1.65	0.6-2	0.07-0.10	0.0-2.9	0.2-0.6	.15
	43-57	16-26	1.50-1.70	0.6-2	0.06-0.10	0.0-2.9	0.2-0.5	.20
	57-67	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
342: Sinkler, dry-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-8	9-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	8-14	13-22	1.15-1.35	0.6-2	0.16-0.20	0.0-2.9	1.0-3.0	.49
	14-20	15-25	1.30-1.50	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.55
	20-33	19-30	1.35-1.55	0.6-2	0.15-0.17	0.0-2.9	0.3-0.8	.49
	33-44	20-30	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.1-0.5	.49
	44-62	23-32	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.1-0.5	.49
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
Arson, dry-----	2-5	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.32
	5-9	12-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	9-15	17-23	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.49
	15-38	18-26	1.45-1.65	0.6-2	0.14-0.16	0.0-2.9	0.3-1.0	.43
	38-43	18-26	1.45-1.65	0.6-2	0.07-0.10	0.0-2.9	0.2-0.6	.15
	43-57	16-26	1.50-1.70	0.6-2	0.06-0.10	0.0-2.9	0.2-0.5	.20
	57-67	---	---	---	---	---	---	---
	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
350: Southwick-----	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
351: Southwick-----	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-7	10-20	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.43
	7-12	12-20	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.49
353: Tensed-----	12-22	13-20	1.25-1.45	0.6-2	0.16-0.18	0.0-2.9	1.0-3.0	.37
	22-24	5-20	1.30-1.55	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.37
	24-58	25-38	1.35-1.60	0.6-2	0.11-0.14	3.0-5.9	0.3-0.8	.15
	58-61	22-35	1.35-1.60	0.6-2	0.06-0.08	0.0-5.9	0.1-0.5	.10
	0-7	10-20	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.43
	7-12	12-20	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.49

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
353: Pedee-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-10	12-23	1.10-1.20	0.2-0.6	0.19-0.21	0.0-2.9	2.0-5.0	.28
	10-19	13-25	1.20-1.45	0.6-2	0.14-0.16	0.0-2.9	1.0-3.0	.24
	19-22	5-15	1.25-1.55	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.24
	22-31	30-50	1.40-1.70	0.06-0.2	0.08-0.12	3.0-8.9	0.2-1.0	.10
	31-60	19-35	1.50-1.70	0.6-2	0.08-0.10	0.0-5.9	0.1-0.5	.10
354: Tensed-----	0-7	10-20	1.10-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.43
	7-12	12-20	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	2.0-5.0	.49
	12-22	13-20	1.25-1.45	0.6-2	0.16-0.18	0.0-2.9	1.0-3.0	.37
	22-24	5-20	1.30-1.55	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.37
	24-58	25-38	1.35-1.60	0.6-2	0.11-0.14	3.0-5.9	0.3-0.8	.15
	58-61	22-35	1.35-1.60	0.6-2	0.06-0.08	0.0-5.9	0.1-0.5	.10
Pedee-----	0-10	12-23	1.10-1.20	0.2-0.6	0.19-0.21	0.0-2.9	2.0-5.0	.28
	10-19	13-25	1.20-1.45	0.6-2	0.14-0.16	0.0-2.9	1.0-3.0	.24
	19-22	5-15	1.25-1.55	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.24
	22-31	30-50	1.40-1.70	0.06-0.2	0.08-0.12	3.0-8.9	0.2-1.0	.10
	31-60	19-35	1.50-1.70	0.6-2	0.08-0.10	0.0-5.9	0.1-0.5	.10
355: Southwick-----	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
Driscoll-----	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-5	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	5-10	15-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	10-17	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-5.9	0.5-2.0	.49
	17-24	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-1.0	.55
	24-26	10-23	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	26-42	32-48	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.32
	42-49	32-45	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.37
	49-60	28-40	1.35-1.60	0.6-2	0.12-0.16	6.0-8.9	0.1-0.5	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion Kw
356: Southwick-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-5	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	5-10	15-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
Driscoll-----	10-17	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-5.9	0.5-2.0	.49
	17-24	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-1.0	.55
	24-26	10-23	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	26-42	32-48	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.32
	42-49	32-45	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.37
	49-60	28-40	1.35-1.60	0.6-2	0.12-0.16	6.0-8.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
360: Larkin-----	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
361: Larkin-----	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
363: Driscoll-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-5	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	5-10	15-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	10-17	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-5.9	0.5-2.0	.49
	17-24	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-1.0	.55
	24-26	10-23	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	26-42	32-48	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.32
	42-49	32-45	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.37
	49-60	28-40	1.35-1.60	0.6-2	0.12-0.16	6.0-8.9	0.1-0.5	.49
364: Larkin-----	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-10	12-25	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	4.0-6.0	.37
	10-18	12-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.5	.43
Southwick-----	18-28	15-25	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-2.0	.55
	28-31	8-16	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	31-49	25-35	1.50-1.65	0.6-2	0.14-0.16	3.0-5.9	0.1-0.5	.49
	49-54	25-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	54-70	22-35	1.40-1.55	0.6-2	0.15-0.17	3.0-5.9	0.1-0.5	.49
	0-6	15-25	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	2.5-5.0	.28
	6-14	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-4.0	.43
	14-22	18-30	1.25-1.45	0.6-2	0.17-0.19	3.0-5.9	0.5-1.0	.49
	22-39	22-30	1.30-1.55	0.6-2	0.16-0.18	3.0-5.9	0.1-0.5	.49
367: Larkin-----	39-60	25-35	1.30-1.60	0.6-2	0.15-0.18	3.0-5.9	0.1-0.5	.49
	0-5	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	5-10	15-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	10-17	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-5.9	0.5-2.0	.49
	17-24	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-1.0	.55
	24-26	10-23	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	26-42	32-48	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.32
	42-49	32-45	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.37
	49-60	28-40	1.35-1.60	0.6-2	0.12-0.16	6.0-8.9	0.1-0.5	.49

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
400: Driscoll-----	0-5	15-25	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	5-10	15-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.43
	10-17	18-25	1.25-1.40	0.6-2	0.18-0.20	0.0-5.9	0.5-2.0	.49
	17-24	15-25	1.30-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-1.0	.55
	24-26	10-23	1.35-1.50	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.64
	26-42	32-48	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.32
	42-49	32-45	1.40-1.60	0.06-0.2	0.12-0.16	6.0-8.9	0.1-0.5	.37
	49-60	28-40	1.35-1.60	0.6-2	0.12-0.16	6.0-8.9	0.1-0.5	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
405: Thatuna-----	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
406: Thatuna-----	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
Naff-----	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
Naff-----	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
Naff-----	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
410: Palouse	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-11	15-22	1.10-1.30	0.2-0.6	0.19-0.21	0.0-2.9	3.5-6.0	.37
	11-18	15-23	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-3.5	.49
	18-26	16-25	1.35-1.45	0.6-2	0.18-0.21	0.0-2.9	0.5-2.0	.55
	26-60	20-28	1.45-1.60	0.6-2	0.17-0.20	0.0-2.9	0.1-0.5	.55
Naff	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
411: Palouse	0-11	15-22	1.10-1.30	0.2-0.6	0.19-0.21	0.0-2.9	3.5-6.0	.37
	11-18	15-23	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-3.5	.49
	18-26	16-25	1.35-1.45	0.6-2	0.18-0.21	0.0-2.9	0.5-2.0	.55
	26-60	20-28	1.45-1.60	0.6-2	0.17-0.20	0.0-2.9	0.1-0.5	.55
414: Naff	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
Thatuna	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
415: Naff	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
415: Tilma-----	0-8	15-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.28
	8-14	15-20	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49
	14-20	15-18	1.25-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	20-23	10-18	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	0.3-0.8	.64
	23-30	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	30-34	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	34-42	32-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	42-60	18-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	0.3-0.5	.55
416: Naff-----	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
Thatuna-----	0-6	16-24	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.32
	6-12	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	2.0-3.0	.43
	12-19	16-24	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	1.0-2.0	.49
	19-28	18-25	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.8-1.5	.55
	28-35	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.6	.64
	35-43	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	43-52	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
	52-60	24-35	1.45-1.60	0.6-2	0.12-0.20	3.0-5.9	0.2-0.3	.49
417: Naff-----	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
Palouse-----	0-11	15-22	1.10-1.30	0.2-0.6	0.19-0.21	0.0-2.9	3.5-6.0	.37
	11-18	15-23	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	1.5-3.5	.49
	18-26	16-25	1.35-1.45	0.6-2	0.18-0.21	0.0-2.9	0.5-2.0	.55
	26-60	20-28	1.45-1.60	0.6-2	0.17-0.20	0.0-2.9	0.1-0.5	.55
420: Garfield-----	0-7	25-35	1.20-1.40	0.6-2	0.19-0.21	3.0-5.9	1.5-3.5	.37
	7-19	35-45	1.30-1.50	0.2-0.6	0.15-0.21	6.0-8.9	0.3-0.8	.43
	19-32	35-45	1.30-1.50	0.06-0.2	0.15-0.21	6.0-8.9	0.3-0.5	.37
	32-45	20-40	1.30-1.50	0.2-0.6	0.15-0.21	6.0-8.9	0.3-0.5	.43
	45-60	20-40	1.25-1.45	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
420: Tilma-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-8	15-20	1.10-1.30	0.6-2	0.19-0.21	0.0-2.9	3.0-5.0	.28
	8-14	15-20	1.15-1.35	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49
	14-20	15-18	1.25-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	20-23	10-18	1.20-1.35	0.6-2	0.19-0.21	0.0-2.9	0.3-0.8	.64
	23-30	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	30-34	35-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	34-42	32-45	1.35-1.45	0.06-0.2	0.15-0.19	3.0-5.9	0.3-0.5	.37
	42-60	18-30	1.40-1.50	0.6-2	0.17-0.19	3.0-5.9	0.3-0.5	.55
421: Naff-----	0-8	15-24	1.10-1.30	0.2-0.6	0.19-0.21	3.0-5.9	2.0-4.0	.37
	8-17	20-26	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.43
	17-26	20-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	0.3-1.3	.49
	26-61	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
	61-80	25-35	1.30-1.50	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.49
Garfield-----	0-5	18-25	1.10-1.30	0.6-2	0.19-0.21	3.0-5.9	1.5-3.5	.43
	5-8	18-30	1.15-1.35	0.6-2	0.19-0.21	3.0-5.9	1.0-3.0	.49
	8-19	35-45	1.30-1.50	0.2-0.6	0.15-0.21	6.0-8.9	0.3-0.8	.43
	19-32	35-45	1.30-1.50	0.06-0.2	0.15-0.21	6.0-8.9	0.3-0.5	.37
	32-45	20-40	1.30-1.50	0.2-0.6	0.15-0.21	6.0-8.9	0.3-0.5	.43
	45-60	20-40	1.25-1.45	0.6-2	0.19-0.21	3.0-5.9	0.3-0.5	.43
500: Hobo-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37
	3-8	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	2.0-4.0	.55
	8-18	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	18-22	10-18	1.50-1.60	0.6-2	0.19-0.21	0.0-2.9	0.7-1.5	.55
	22-30	18-22	1.50-1.65	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.55
	30-44	18-25	1.50-1.65	0.6-2	0.13-0.17	0.0-2.9	0.3-0.7	.32
	44-60	10-25	1.50-1.65	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.17
Threbear-----	0-2	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	3.0-8.0	.37
	4-9	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	2.0-4.0	.55
	9-20	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	1.0-3.0	.64
	20-24	10-20	1.50-1.70	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.64
	24-34	16-22	1.60-1.75	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	34-55	21-32	1.70-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.55
	55-60	21-32	1.60-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
501: Hobo, warm-----								
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37
	3-8	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	2.0-4.0	.55
	8-18	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	18-22	10-18	1.50-1.60	0.6-2	0.14-0.17	0.0-2.9	0.7-1.5	.55
	22-30	18-22	1.50-1.65	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.55
	30-44	18-25	1.50-1.65	0.6-2	0.13-0.17	0.0-2.9	0.3-0.7	.32
	44-60	10-25	1.50-1.65	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.17
Threebear, warm-----								
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	3.0-8.0	.37
	3-7	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	2.0-4.0	.55
	7-18	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	1.0-3.0	.55
	18-29	10-20	1.50-1.70	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.64
	29-36	16-22	1.60-1.75	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	36-48	21-32	1.70-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.55
	48-60	21-32	1.60-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.49
510: Honeyjones-----								
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05
Ahres-----								
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion Kw
600: Ardenvoir-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	0.70-0.95	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-60	---	---	---	---	---	---	---
Huckle-----	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.70-0.95	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.70-0.95	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.70-0.95	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---
601: Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---
McCrosket-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-12	5-15	1.00-1.20	0.6-2	0.18-0.21	0.0-2.9	3.0-8.0	.20
	12-32	10-25	1.20-1.50	0.6-2	0.07-0.11	0.0-2.9	1.0-3.0	.10
	32-42	5-20	1.30-1.55	0.6-2	0.04-0.08	0.0-2.9	0.3-1.0	.10
	42-52	---	---	---	---	---	---	---
605: Benewah-----	0-6	10-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	6-15	10-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	15-18	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.4-0.8	.64
	18-23	24-30	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.3-0.6	.49
	23-34	20-35	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.3-0.5	.49
	34-60	20-38	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.2-0.4	.49

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
605: Rasser-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-4	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	4-11	10-18	1.10-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	11-20	16-25	1.25-1.55	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.20
	20-41	22-32	1.35-1.60	0.6-2	0.08-0.12	0.0-2.9	0.3-0.8	.17
	41-60	24-35	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.2-0.4	.15
606: Benewah-----	0-6	10-20	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	6-15	10-20	1.20-1.40	0.6-2	0.19-0.21	0.0-2.9	0.5-1.0	.64
	15-18	10-15	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.4-0.8	.64
	18-23	24-30	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.3-0.6	.49
	23-34	20-35	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.3-0.5	.49
	34-60	20-38	1.45-1.65	0.6-2	0.12-0.16	0.0-2.9	0.2-0.4	.49
Rasser-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-4	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32
	4-11	10-18	1.10-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49
	11-20	16-25	1.25-1.55	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.20
	20-41	22-32	1.35-1.60	0.6-2	0.08-0.12	0.0-2.9	0.3-0.8	.17
	41-60	24-35	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.2-0.4	.15
610: Schumacher-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-8	15-24	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-7.0	.28
	8-20	17-25	1.10-1.30	0.6-2	0.18-0.20	0.0-2.9	2.0-6.0	.37
	20-27	20-26	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.43
	27-34	21-29	1.30-1.45	0.6-2	0.14-0.16	3.0-5.9	0.5-2.0	.28
	34-41	25-30	1.40-1.50	0.6-2	0.07-0.10	3.0-5.9	0.5-1.5	.15
	41-47	24-30	1.40-1.50	0.6-2	0.07-0.10	3.0-5.9	0.3-1.0	.20
	47-57	---	---	---	---	---	---	---
611: Schumacher-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-8	15-24	1.00-1.20	0.6-2	0.21-0.23	0.0-2.9	4.0-7.0	.28
	8-20	17-25	1.10-1.30	0.6-2	0.18-0.20	0.0-2.9	2.0-6.0	.37
	20-27	20-26	1.20-1.40	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.49
	27-34	21-29	1.30-1.45	0.6-2	0.14-0.16	3.0-5.9	0.5-2.0	.32
	34-41	25-30	1.40-1.50	0.6-2	0.07-0.10	3.0-5.9	0.5-1.5	.15
	41-47	24-30	1.40-1.50	0.6-2	0.07-0.10	3.0-5.9	0.3-1.0	.20
	47-57	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
611: Tekoa-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-7	10-20	1.00-1.20	0.6-2	0.16-0.20	0.0-2.9	3.0-7.0	.17
	7-13	12-22	1.10-1.25	0.6-2	0.12-0.16	0.0-2.9	2.5-5.5	.15
	13-17	15-25	1.15-1.30	0.6-2	0.10-0.12	0.0-2.9	2.0-4.0	.10
	17-27	21-30	1.20-1.40	0.6-2	0.06-0.10	0.0-5.9	1.0-2.0	.15
	27-33	25-35	1.25-1.50	0.6-2	0.05-0.08	0.0-5.9	0.5-1.0	.10
	33-43	---	---	---	---	---	---	---
612: Libertybutte-----	0-4	10-20	1.20-1.40	0.6-2	0.14-0.16	0.0-2.9	2.0-6.0	.20
	4-11	15-25	1.30-1.50	0.6-2	0.12-0.16	0.0-2.9	1.5-5.0	.24
	11-16	15-25	1.40-1.50	0.6-2	0.10-0.14	0.0-2.9	1.0-3.0	.20
	16-19	---	---	---	---	---	---	---
	19-29	---	---	---	---	---	---	---
	0-7	10-20	1.00-1.20	0.6-2	0.16-0.20	0.0-2.9	3.0-7.0	.17
	7-13	12-22	1.10-1.25	0.6-2	0.12-0.16	0.0-2.9	2.5-5.5	.15
613: Ardenvoir, dry-----	13-17	15-25	1.15-1.30	0.6-2	0.10-0.12	0.0-2.9	2.0-4.0	.10
	17-27	21-30	1.20-1.40	0.6-2	0.06-0.10	0.0-5.9	1.0-2.0	.15
	27-33	25-35	1.25-1.50	0.6-2	0.05-0.08	0.0-5.9	0.5-1.0	.10
	33-43	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.00-1.20	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20
Lotuspoint-----	3-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10
	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	41-60	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	60-70	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
614: Ardenvoir, dry-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.00-1.20	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20
	3-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10
	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	41-60	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	60-70	---	---	---	---	---	---	---
Lotuspoint-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
	0-7	10-20	1.00-1.20	0.6-2	0.16-0.20	0.0-2.9	3.0-7.0	.17
	7-13	12-22	1.10-1.25	0.6-2	0.12-0.16	0.0-2.9	2.5-5.5	.15
	13-17	15-25	1.15-1.30	0.6-2	0.10-0.12	0.0-2.9	2.0-4.0	.10
617: Tekoa-----	17-27	21-30	1.20-1.40	0.6-2	0.06-0.10	0.0-5.9	1.0-2.0	.15
	27-33	25-35	1.25-1.50	0.6-2	0.05-0.08	0.0-5.9	0.5-1.0	.10
	33-43	---	---	---	---	---	---	---
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
621: Huckle-----	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
625: Huckle-----	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---
Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---
650: Grangemont-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	8-10	0.65-0.95	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	4-10	8-10	0.75-1.00	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	10-18	15-20	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.5	.55
	18-25	15-20	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.2-0.4	.55
	25-34	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	34-42	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	42-53	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	53-63	20-30	1.45-1.65	0.6-2	0.14-0.16	0.0-2.9	0.1-0.3	.32
651: Kingspeak-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
651: Shayhill, stony surface-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	3.0-7.0	.37
	3-10	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.48
	10-19	10-18	1.30-1.50	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.29
	19-28	10-18	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.8-1.2	.15
	28-48	18-28	1.45-1.60	0.6-2	0.08-0.10	0.0-2.9	0.3-0.8	.05
	48-55	15-25	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	55-64	15-20	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.10
652: Kingspeak-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
653: Kingspeak, cool-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.24
	4-9	10-18	1.05-1.20	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.32
655: Tigley, moist-----	9-34	15-22	1.25-1.45	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.20
	34-60	18-25	1.35-1.65	0.6-2	0.10-0.14	0.0-5.9	0.2-0.5	.10
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
656: Kingspeak, dry-----	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
660: Threebear-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-2	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	3.0-8.0	.37
	4-9	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	2.0-4.0	.55
	9-20	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	1.0-3.0	.64
	20-24	10-20	1.50-1.70	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	24-34	16-22	1.60-1.75	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	34-55	21-32	1.70-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.55
	55-60	21-32	1.60-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.49
662: Threebear, warm-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	3.0-8.0	.37
	3-7	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	2.0-4.0	.55
	7-18	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	1.0-3.0	.55
	18-29	10-20	1.50-1.70	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.64
	29-36	16-22	1.60-1.75	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	36-48	21-32	1.70-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.55
	48-60	21-32	1.60-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.49
663: Threebear, warm-----	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-10	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	3.0-8.0	.37
	3-7	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	2.0-4.0	.55
	7-18	3-10	0.65-0.90	0.6-2	0.25-0.35	0.0-2.9	1.0-3.0	.55
	18-29	10-20	1.50-1.70	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.64
	29-36	16-22	1.60-1.75	0.6-2	0.14-0.16	0.0-2.9	0.3-0.5	.55
	36-48	21-32	1.70-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.55
	48-60	21-32	1.60-1.80	0.6-2	0.02-0.03	3.0-5.9	0.2-0.4	.49
Porrett-----	0-3	15-25	0.90-1.00	0.2-0.6	0.20-0.23	0.0-2.9	2.0-5.0	.32
	3-14	10-20	0.90-1.00	0.2-0.6	0.19-0.21	0.0-2.9	1.0-2.0	.55
	14-21	10-20	1.15-1.35	0.6-2	0.17-0.19	0.0-2.9	0.5-1.5	.55
	21-60	23-35	1.30-1.60	0.6-2	0.14-0.16	0.0-5.9	0.2-0.8	.43

Table 29.---Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
665: Grangemont, warm-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	8-10	0.65-0.95	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	4-10	8-10	0.75-1.00	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	10-18	15-20	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.3-0.5	.55
	18-25	15-20	1.40-1.50	0.6-2	0.19-0.21	0.0-2.9	0.2-0.4	.55
	25-34	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	34-42	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	42-53	18-30	1.45-1.60	0.6-2	0.19-0.21	0.0-2.9	0.1-0.3	.55
	53-63	20-30	1.45-1.65	0.6-2	0.14-0.16	0.0-2.9	0.1-0.3	.32
670: Honeyjones, warm-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
671: Honeyjones-----	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
680: Ardenvoir-----	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
680: Huckle-----	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---
681: Huckle-----	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---
Ahrs-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10
700: Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
700: Huckle-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10	.10
	47-57	---	---	---	---	---	---	---	---
701: Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	48-58	---	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-60	---	---
McCroset-----	2-12	5-15	1.00-1.20	0.6-2	0.18-0.21	0.0-2.9	3.0-8.0	.20	.20
	12-32	10-25	1.20-1.50	0.6-2	0.07-0.11	0.0-2.9	1.0-3.0	.10	.10
	32-42	5-20	1.30-1.55	0.6-2	0.04-0.08	0.0-2.9	0.3-1.0	.10	.10
	42-52	---	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-3	5-15	0.70-0.95	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20	.20
	3-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10	.10
703: Ardenvoir, dry-----	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	41-60	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05	.05
	60-70	---	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-3	5-15	0.70-0.95	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20	.20
	3-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10	.10
	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
703: Ardenvoir-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	0.70-0.95	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-60	---	---	---	---	---	---	---
704: Ardenvoir, dry-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	0.70-0.95	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20
	3-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10
	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	41-60	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	60-70	---	---	---	---	---	---	---
Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	0.70-0.95	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	0.70-0.95	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-60	---	---	---	---	---	---	---
705: Ardenvoir-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
705: Rasser-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-4	10-18	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.5-4.5	.32	.32
	4-11	10-18	1.10-1.35	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49
	11-20	16-25	1.25-1.55	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.20	.20
	20-41	22-32	1.35-1.60	0.6-2	0.08-0.12	0.0-2.9	0.3-0.8	.17	.17
706: Ardenvoir-----	41-60	24-35	1.45-1.60	0.6-2	0.05-0.07	0.0-2.9	0.2-0.4	.15	.15
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20	.20
707: Huckle, dry-----	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	48-58	---	---	---	---	---	---	---	---
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43	.43
Ardenvoir-----	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10	.10
	47-57	---	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	48-58	---	---	---	---	---	---	---	---

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
								Kw
710: McCrosket	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-12	5-15	1.00-1.20	0.6-2	0.18-0.21	0.0-2.9	3.0-8.0	.20
	12-32	10-25	1.20-1.50	0.6-2	0.07-0.11	0.0-2.9	1.0-3.0	.10
	32-42	5-20	1.30-1.55	0.6-2	0.04-0.08	0.0-2.9	0.3-1.0	.10
	42-52	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
711: McCrosket	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-2.9	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-12	5-15	1.00-1.20	0.6-2	0.18-0.21	0.0-2.9	3.0-8.0	.20
	12-32	10-25	1.20-1.50	0.6-2	0.07-0.11	0.0-2.9	1.0-3.0	.10
	32-42	5-20	1.30-1.55	0.6-2	0.04-0.08	0.0-2.9	0.3-1.0	.10
712: McCrosket	42-52	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-60	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
712: Tekoa-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-7	10-20	1.00-1.20	0.6-2	0.16-0.20	0.0-2.9	3.0-7.0	.17
	7-13	12-22	1.10-1.25	0.6-2	0.12-0.16	0.0-2.9	2.5-5.5	.15
	13-17	15-25	1.15-1.30	0.6-2	0.10-0.12	0.0-2.9	2.0-4.0	.10
	17-27	21-30	1.20-1.40	0.6-2	0.06-0.10	0.0-5.9	1.0-2.0	.15
	27-33	25-35	1.25-1.50	0.6-2	0.05-0.08	0.0-5.9	0.5-1.0	.10
716: Ahrs-----	33-43	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
720: Huckle-----	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
721: Huckle-----	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
721: Huckle-----	47-57	---	---	---	---	---	---	---
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43
721: Huckle-----	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10
	47-57	---	---	---	---	---	---	---
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
721: Ardenvoir-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	48-58	---	---	---	---	---	---	---
735: Lotuspoint, stony surface-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.24
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
736: Lotuspoint, stony surface-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.24
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
756: Tigley-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.24
	4-9	10-18	1.05-1.20	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.32
	9-34	15-22	1.25-1.45	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.20
	34-60	18-25	1.35-1.65	0.6-2	0.10-0.14	0.0-5.9	0.2-0.5	.10

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
757: Hugus, warm-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-4	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.43	.43
	4-9	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49	.49
	9-20	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-3.0	.55	.55
	20-39	15-20	1.40-1.60	0.6-2	0.05-0.12	0.0-2.9	0.7-1.5	.20	.20
	39-55	15-20	1.50-1.60	0.6-2	0.05-0.12	0.0-2.9	0.3-0.7	.10	.10
	55-63	15-20	1.50-1.60	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
758: Tigley, moist-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-4	10-15	1.00-1.20	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.24	.24
	4-9	10-18	1.05-1.20	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.32	.32
	9-34	15-22	1.25-1.45	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.20	.20
	34-60	18-25	1.35-1.65	0.6-2	0.10-0.14	0.0-5.9	0.2-0.5	.10	.10
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-4	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37	.37
Hugus-----	4-9	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49	.49
	9-20	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-3.0	.55	.55
	20-31	15-20	1.40-1.60	0.6-2	0.05-0.12	0.0-2.9	0.7-1.5	.20	.20
	31-47	15-20	1.50-1.60	0.6-2	0.05-0.12	0.0-2.9	0.3-0.7	.10	.10
	47-60	15-20	1.50-1.60	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-4	5-12	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	3.0-8.0	.15	.15
	4-9	5-12	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	1.0-3.0	.24	.24
765: Saint Maries-----	9-22	5-12	1.00-1.20	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.15	.15
	22-28	5-12	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.3-0.7	.10	.10
	28-38	5-12	1.30-1.50	0.6-2	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10
	38-47	5-12	1.30-1.50	0.6-2	0.03-0.07	0.0-2.9	0.1-0.3	.10	.10
	47-60	5-12	1.30-1.50	0.6-2	0.03-0.07	0.0-2.9	0.1-0.3	.05	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-4	5-12	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	3.0-8.0	.15	.15
	4-9	5-12	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	1.0-3.0	.24	.24

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
765: Huckle-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32	.32
	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43	.17
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.15	.15
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10	.10
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10	.10
	47-57	---	---	---	---	---	---	---	---
770: Pinecreek-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-6	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.5-7.0	.24	.24
	6-12	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.0-6.5	.28	.28
	12-19	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.24	.24
	19-24	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28	.28
	24-30	3-10	1.30-1.50	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.17	.17
	30-70	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.2-0.6	.05	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
771: Honeyjones, warm-----	2-3	3-9	0.70-0.95	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37	.37
	3-7	3-9	0.70-0.95	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55	.55
	7-19	3-9	0.70-0.95	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37	.37
772: Honeyjones, warm-----	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55	.55

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
772: Ahrs-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10	.10
773: Honeyjones, dry-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05	.05
774: Pinecreek, moist-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-6	3-8	0.65-0.85	0.6-2	0.19-0.23	0.0-2.9	3.5-7.0	.37	.37
	6-12	3-8	0.65-0.85	0.6-2	0.19-0.23	0.0-2.9	3.0-6.5	.49	.49
	12-19	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.24	.24
	19-24	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28	.28
	24-30	3-10	1.30-1.50	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.17	.17
	30-70	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.2-0.6	.05	.05
775: Pinecreek, moist-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-6	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.5-7.0	.24	.24
	6-12	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.0-6.5	.28	.28
	12-19	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.24	.24
	19-24	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28	.28
	24-30	3-10	1.30-1.50	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.17	.17
	30-70	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.2-0.6	.05	.05

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
776: Cassyhill-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---	
	1-7	5-15	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	3.0-6.0	.15	
	7-11	5-15	1.10-1.30	0.6-2	0.08-0.10	0.0-2.9	2.0-4.0	.15	
	11-14	5-20	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.5-1.5	.05	
777: Boulder creek, warm----	14-24	---	---	---	---	---	---	---	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	
	1-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	
	3-4	3-9	0.65-0.85	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37	
	4-8	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	2.0-4.0	.49	
778: Cassyhill-----	8-17	3-9	0.65-0.90	0.6-2	0.14-0.21	0.0-2.9	1.0-3.0	.55	
	17-25	3-9	1.30-1.50	0.6-2	0.04-0.11	0.0-2.9	0.5-1.0	.17	
	25-33	3-9	1.30-1.50	0.6-2	0.03-0.06	0.0-2.9	0.3-0.5	.20	
	33-40	3-9	1.30-1.50	2-6	0.03-0.05	0.0-2.9	0.1-0.3	.17	
	40-55	2-5	1.30-1.50	6-20	0.03-0.05	0.0-2.9	0.1-0.2	.10	
779: Boulder creek-----	55-60	2-5	1.30-1.50	6-20	0.03-0.05	0.0-2.9	0.1-0.2	.10	
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---	
	1-7	5-15	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	3.0-6.0	.15	
	7-11	5-15	1.10-1.30	0.6-2	0.08-0.10	0.0-2.9	2.0-4.0	.15	
	11-14	5-20	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.5-1.5	.05	
Lotuspoint-----	14-24	---	---	---	---	---	---	---	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20	
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28	
779: Boulder creek-----	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05	
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05	
	26-36	---	---	---	---	---	---	---	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	
779: Boulder creek-----	2-3	3-9	0.65-0.85	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37	
	3-8	3-9	0.65-0.90	0.6-2	0.14-0.21	0.0-2.9	2.0-4.0	.49	
	8-17	3-9	0.65-0.90	0.6-2	0.14-0.19	0.0-2.9	1.0-3.0	.28	
	17-33	3-9	1.30-1.50	0.6-2	0.04-0.11	0.0-2.9	0.5-1.0	.05	
	33-43	2-5	1.40-1.60	2-6	0.03-0.07	0.0-2.9	0.1-0.2	.10	
779: Boulder creek-----	43-60	2-5	1.40-1.60	2-6	0.03-0.07	0.0-2.9	0.1-0.2	.10	
	60-64	2-5	1.40-1.60	2-6	0.03-0.05	0.0-2.9	0.1-0.2	.10	

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
780: Ardenvoir-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-6	5-15	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-9.0	.20	.20
	6-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	1.0-3.0	.28	.28
	11-19	5-15	1.30-1.50	0.6-2	0.13-0.16	0.0-2.9	0.3-1.0	.28	.28
	19-39	5-10	1.35-1.55	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.20	.20
	39-48	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	48-58	---	---	---	---	---	---	---	---
	0-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	2-3	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	3-4	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.32	.32
Huckle-----	4-8	5-10	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55	.55
	8-19	5-10	0.65-0.90	0.6-2	0.17-0.21	0.0-2.9	0.5-1.0	.43	.43
	19-28	5-15	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.3-0.5	.17	.17
	28-38	5-15	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.15	.15
	38-47	5-15	1.40-1.60	0.6-2	0.05-0.07	0.0-2.9	0.1-0.2	.10	.10
	47-57	---	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---	---
	2-5	5-12	1.00-1.20	0.6-2	0.14-0.16	0.0-2.9	3.0-8.0	.17	.17
	5-9	5-12	1.00-1.20	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.24	.24
	9-17	5-12	1.00-1.20	0.6-2	0.06-0.08	0.0-2.9	0.5-1.0	.10	.10
	17-24	5-12	1.40-1.50	0.6-2	0.05-0.08	0.0-2.9	0.3-0.7	.10	.10
Saint Maries, dry-----	24-32	5-12	1.40-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10	.10
	32-50	5-12	1.40-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05	.05
	50-60	5-12	1.40-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10	.10
	0-3	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	3-12	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.17	.17
	12-22	3-8	0.65-0.90	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.15	.15
	22-35	3-8	1.25-1.50	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.15	.15
	35-48	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.2-0.8	.10	.10
	48-60	3-8	1.30-1.50	0.6-2	0.03-0.06	0.0-2.9	0.1-0.5	.05	.05
	0-3	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	3-12	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.17	.17
	12-22	3-8	0.65-0.90	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.15	.15
	22-35	3-8	1.25-1.50	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.15	.15
781: Ahrs, moist-----	35-48	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.2-0.8	.10	.10
	48-60	3-8	1.30-1.50	0.6-2	0.03-0.06	0.0-2.9	0.1-0.5	.05	.05
	0-3	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	3-12	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.17	.17
	12-22	3-8	0.65-0.90	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.15	.15
	22-35	3-8	1.25-1.50	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.15	.15
	35-48	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.2-0.8	.10	.10
	48-60	3-8	1.30-1.50	0.6-2	0.03-0.06	0.0-2.9	0.1-0.5	.05	.05
	0-3	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---	---
	3-12	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.17	.17
	12-22	3-8	0.65-0.90	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.15	.15
	22-35	3-8	1.25-1.50	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.15	.15
	35-48	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.2-0.8	.10	.10

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion Kw
781: Honeyjones, warm-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05
782: Ardenvoir, dry-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.00-1.20	0.6-2	0.14-0.17	0.0-2.9	3.0-9.0	.20
	3-11	5-15	1.00-1.20	0.6-2	0.13-0.16	0.0-2.9	2.0-6.0	.20
	11-18	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	1.0-3.0	.15
	18-32	5-15	1.30-1.50	0.6-2	0.09-0.12	0.0-2.9	0.3-1.0	.10
	32-41	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.10
	41-60	5-10	1.35-1.55	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	60-70	---	---	---	---	---	---	---
	0-1	1-10	0.10-0.30	6-100	0.30-0.60	---	60-95	---
Cassyhill-----	1-7	5-15	1.00-1.20	0.6-2	0.10-0.12	0.0-2.9	3.0-6.0	.15
	7-11	5-15	1.10-1.30	0.6-2	0.08-0.10	0.0-2.9	2.0-4.0	.15
	11-14	5-20	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.5-1.5	.05
	14-24	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-6	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.5-7.0	.24
	6-12	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.0-6.5	.28
	12-19	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.24
	19-24	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28
784: Pinecreek, moist-----	24-30	3-10	1.30-1.50	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.17
	30-70	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.2-0.6	.05
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
Lotuspoint-----	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28
	10-16	3-10	1.30-1.50	0.6-2	0.06-0.08	0.0-2.9	0.3-0.8	.05
	16-26	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.1-0.5	.05
	26-36	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-4	3-8	0.65-0.95	0.6-2	0.14-0.16	0.0-2.9	4.0-8.0	.20
	4-10	3-8	0.65-0.95	0.6-2	0.12-0.16	0.0-2.9	2.0-4.0	.28

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
791: Latour-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	2-10	0.65-0.85	0.6-2	0.20-0.29	0.0-2.9	4.0-9.5	.24
	3-14	2-10	0.65-0.90	0.6-2	0.15-0.25	0.0-2.9	3.0-7.0	.17
	14-40	2-10	0.75-0.90	0.6-2	0.10-0.20	0.0-2.9	1.0-3.0	.10
	40-60	2-12	1.30-1.60	0.6-2	0.02-0.10	0.0-2.9	0.5-2.0	.05
800: Rock outcrop-----	0-60	---	---	---	---	---	---	---
	0-60	---	---	---	---	---	---	---
801: Pits, gravel-----	0-60	---	---	---	---	---	---	---
	0-60	---	---	---	---	---	---	---
802: Kingspeak-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	5-15	1.15-1.25	0.6-2	0.19-0.21	0.0-2.9	2.0-5.0	.37
	3-10	5-15	1.20-1.35	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.55
	10-30	8-17	1.40-1.65	0.6-2	0.17-0.19	0.0-2.9	0.3-0.8	.55
	30-60	15-28	1.45-1.70	0.6-2	0.15-0.17	0.0-2.9	0.1-0.3	.55
Urban land-----	---	---	---	---	---	---	---	---
	---	---	---	---	---	---	---	---
900: Water	---	---	---	---	---	---	---	---
	---	---	---	---	---	---	---	---
901: Aquandic Endoaquepts--	0-11	8-15	0.90-1.10	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.49
	11-40	10-17	1.25-1.50	0.6-2	0.14-0.18	0.0-2.9	0.5-2.0	.49
	40-60	5-12	1.40-1.60	0.6-2	0.03-0.06	0.0-2.9	0.1-0.5	.10
Aquic Udifluvents----	0-8	8-15	1.25-1.50	0.6-2	0.19-0.21	0.0-2.9	0.5-2.0	.49
	8-22	5-15	1.30-1.55	0.6-2	0.14-0.16	0.0-2.9	0.5-2.0	.32
	22-60	2-10	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.1-0.5	.02

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
902: Ahrs-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10
903: Ahrs-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10
Pinecreek-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-6	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.5-7.0	.24
	6-12	3-8	0.65-0.85	0.6-2	0.16-0.18	0.0-2.9	3.0-6.5	.24
	12-19	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.24
	19-24	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	1.0-2.0	.28
	24-30	3-10	1.30-1.50	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.17
	30-70	3-10	1.30-1.50	0.6-2	0.05-0.07	0.0-2.9	0.2-0.6	.05
907: Honeyjones-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
908: Honeyjones-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-9.5	.37
	3-7	3-9	0.65-0.90	0.6-2	0.19-0.21	0.0-2.9	1.0-3.0	.55
	7-19	3-9	0.65-0.90	0.6-2	0.16-0.21	0.0-2.9	1.0-2.0	.55
	19-24	3-10	1.30-1.50	0.6-2	0.06-0.12	0.0-2.9	0.3-1.0	.17
	24-35	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.3	.10
	35-47	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.2	.05
	47-60	3-10	1.30-1.60	0.6-2	0.06-0.08	0.0-2.9	0.1-0.1	.05
Ahrs-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	30-70	---
	2-6	3-8	0.65-0.85	0.6-2	0.14-0.16	0.0-2.9	3.0-6.0	.20
	6-14	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	2.0-4.0	.20
	14-23	3-8	0.65-0.85	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.20
	23-30	3-8	1.30-1.50	0.6-2	0.07-0.11	0.0-2.9	0.3-1.0	.17
	30-41	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.5	.10
	41-51	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.3	.05
	51-60	3-8	1.30-1.50	0.6-2	0.05-0.08	0.0-2.9	0.1-0.2	.10
913: Hobo-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-2	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	2-3	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	3.0-8.0	.37
	3-8	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	2.0-4.0	.55
	8-18	3-9	0.65-0.90	0.6-2	0.19-0.23	0.0-2.9	1.0-3.0	.55
	18-22	10-18	1.50-1.60	0.6-2	0.19-0.21	0.0-2.9	0.7-1.5	.55
	22-30	18-22	1.50-1.65	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.55
	30-44	18-25	1.50-1.65	0.6-2	0.13-0.17	0.0-2.9	0.3-0.7	.32
	44-60	10-25	1.50-1.65	0.6-2	0.07-0.11	0.0-2.9	0.1-0.3	.17
Ac1: Arson-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-6	10-18	0.70-0.95	0.6-2	0.12-0.25	0.0-2.9	0.9-3.7	.55
	6-10	10-23	0.70-0.95	0.6-2	0.12-0.27	0.0-2.9	0.3-0.4	.55
	10-22	14-22	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.3-0.8	.49
	22-33	16-25	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.1-0.3	.28
	33-48	8-17	1.43-1.67	0.6-2	0.05-0.20	0.0-2.9	0.0-0.1	.15
	48-60	---	---	---	---	---	---	---

Table 29.---Physical Properties of the Soils---Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion
Ac1: Carlinton-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct	Kw
	0-1	10-20	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-8	10-20	0.70-0.95	0.6-2	0.15-0.26	0.0-2.9	4.5-7.0	.37
	8-19	15-26	1.20-1.50	0.6-2	0.15-0.26	0.0-2.9	1.0-2.5	.49
	19-31	18-30	1.40-1.70	0.6-2	0.13-0.20	0.0-2.9	0.6-1.0	.49
	31-39	20-25	1.40-1.70	0.6-2	0.13-0.20	3.0-5.9	0.2-0.8	.49
	39-60	23-33	1.55-1.75	0.6-2	0.00-0.00	0.0-5.9	0.3-0.7	.43
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-6	10-18	0.70-0.95	0.6-2	0.12-0.25	0.0-2.9	0.9-3.7	.55
	6-10	10-23	0.70-0.95	0.6-2	0.12-0.27	0.0-2.9	0.3-0.4	.55
Ac2: Arson, dry-----	10-22	14-22	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.3-0.8	.49
	22-33	16-25	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.1-0.3	.28
	33-48	8-17	1.43-1.67	0.6-2	0.05-0.20	0.0-2.9	0.0-0.1	.15
	48-60	---	---	---	---	---	---	---
	0-1	10-20	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-8	10-20	0.70-0.95	0.6-2	0.15-0.26	0.0-2.9	4.5-7.0	.37
	8-19	15-26	1.20-1.50	0.6-2	0.15-0.26	0.0-2.9	1.0-2.5	.49
	19-31	18-30	1.40-1.70	0.6-2	0.13-0.20	0.0-2.9	0.6-1.0	.49
	31-39	20-25	1.40-1.70	0.6-2	0.13-0.20	3.0-5.9	0.2-0.8	.49
	39-60	23-33	1.55-1.75	0.6-2	0.00-0.00	0.0-5.9	0.3-0.7	.43
An4: Arson, dry-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-6	10-18	0.70-0.95	0.6-2	0.12-0.25	0.0-2.9	0.9-3.7	.55
	6-10	10-23	0.70-0.95	0.6-2	0.12-0.27	0.0-2.9	0.3-0.4	.55
	10-22	14-22	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.3-0.8	.49
	22-33	16-25	1.27-1.63	0.6-2	0.15-0.27	0.0-2.9	0.1-0.3	.28
	33-48	8-17	1.43-1.67	0.6-2	0.05-0.20	0.0-2.9	0.0-0.1	.15
	48-60	---	---	---	---	---	---	---
	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	60-95	---
	1-5	8-15	0.70-0.95	0.6-2	0.12-0.25	0.0-2.9	1.0-3.0	.43
	5-10	8-18	0.70-0.95	0.6-2	0.10-0.25	0.0-2.9	1.0-2.5	.24
Minaloosa, dry-----	10-32	14-22	1.30-1.60	0.6-2	0.06-0.16	0.0-2.9	0.5-2.0	.15
	32-41	6-22	1.30-1.60	0.6-2	0.04-0.14	0.0-2.9	0.1-1.0	.10
	41-60	6-18	1.30-1.60	0.6-2	0.01-0.14	0.0-2.9	0.1-0.5	.10

Table 29.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion	
								Kw	
Rs2: Reggear, moist-----	In	Pct	g/cc	In/hr	In/in	Pct	Pct		
	0-1	8-16	0.10-0.30	6-100	0.30-0.60	---	28-70	---	---
	1-4	8-16	0.70-0.95	0.6-2	0.21-0.23	0.0-2.9	3.5-8.5	.43	.43
	4-8	8-16	0.70-0.95	0.6-2	0.21-0.23	0.0-2.9	1.6-5.0	.55	.55
	8-18	14-21	0.66-0.87	0.6-2	0.21-0.23	0.0-2.9	0.6-1.6	.49	.49
	18-31	16-28	1.35-1.70	0.6-2	0.15-0.19	3.0-5.9	0.3-0.6	.49	.49
	31-60	19-38	1.57-1.92	0.6-2	0.00-0.00	6.0-8.9	0.2-0.4	.43	.43
Stewah-----	0-1	1-25	0.10-0.30	6-100	0.30-0.60	---	28-70	---	---
	1-5	8-12	0.70-0.95	0.6-2	0.15-0.27	0.0-2.9	2.0-8.5	.43	.43
	5-10	8-12	0.70-0.95	0.6-2	0.16-0.27	0.0-2.9	0.7-2.5	.55	.55
	10-16	12-21	1.30-1.66	0.6-2	0.10-0.26	0.0-2.9	0.3-1.1	.55	.55
	16-25	10-18	1.30-1.66	0.6-2	0.09-0.20	0.0-2.9	0.3-1.1	.20	.20
	25-59	8-12	1.50-1.80	0.6-2	0.01-0.12	0.0-2.9	0.1-0.5	.10	.10
	59-69	---	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
105: Aquic Udifluvents, protected-----	0-8	6.1-12	---	5.6-7.3	0	0	0	0
	8-22	4.0-12	---	5.6-7.3	0	0	0	0
	22-60	1.6-7.4	---	5.6-7.3	0	0	0	0
Typic Fluvaquents, protected-----	0-9	4.2-9.9	---	5.6-6.5	0	0	0	0
	9-27	3.8-9.1	---	5.6-6.5	0	0	0	0
	27-60	2.3-7.4	---	5.1-6.5	0	0	0	0
116: Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
Caldwell-----	0-4	14-20	---	6.1-7.3	0	0	0	0
	4-10	13-21	---	6.1-7.3	0	0	0	0
	10-16	13-23	---	6.1-7.3	0	0	0	0
	16-21	16-23	---	6.1-7.3	0	0	0	0
	21-30	15-23	---	6.1-7.3	0	0	0	0
	30-40	15-22	---	6.6-7.3	0	0	0	0
	40-52	15-28	---	6.6-7.3	0	0	0	0
	52-60	14-28	---	6.6-7.3	0	0	0	0
118: Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
Cald-----	0-7	14-20	---	6.0-7.3	0	0	0	0
	7-13	13-22	---	5.8-7.3	0	0	0	0
	13-17	9.1-22	---	5.8-7.3	0	0	0	0
	17-25	5.6-23	---	6.0-7.3	0	0	0	0
	25-40	16-28	---	6.2-7.3	0	0	0	0
	40-48	16-28	---	6.4-7.8	0	0	0	0
	48-60	16-27	---	6.4-7.8	0	0	0	0
120: Latahco-----	0-13	14-22	---	5.6-7.3	0	0	0	0
	13-20	5.5-17	---	5.6-7.3	0	0	0	0
	20-26	20-28	---	6.5-7.5	0	0	0	0
	26-42	19-28	---	7.6-8.4	2-4	0	0	0
	42-51	19-27	---	7.0-7.8	0	0	0	0
	51-62	16-23	---	7.4-8.4	0-4	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
121: Latahco-----	0-13	14-22	---	5.6-7.3	0	0	0	0
	13-20	5.5-17	---	5.6-7.3	0	0	0	0
	20-26	20-28	---	6.5-7.5	0	0	0	0
	26-42	19-28	---	7.6-8.4	2-4	0	0	0
	42-51	19-27	---	7.0-7.8	0	0	0	0
	51-62	16-23	---	7.4-8.4	0-4	0	0	0
Lovell-----	0-8	13-25	---	5.6-7.0	0	0	0	0
	8-18	10-22	---	5.6-7.0	0	0	0	0
	18-22	9.9-19	---	5.6-7.0	0	0	0	0
	22-34	10-19	---	6.1-7.3	0	0	0	0
	34-51	10-17	---	6.6-7.3	0	0	0	0
	51-60	8.8-15	---	6.6-7.3	0	0	0	0
122: Tilma-----	0-8	13-18	---	5.6-7.3	0	0	0	0
	8-14	13-18	---	5.6-7.3	0	0	0	0
	14-20	13-16	---	6.1-7.3	0	0	0	0
	20-23	8.5-15	---	6.1-7.3	0	0	0	0
	23-30	26-34	---	5.6-7.3	0	0	0	0
	30-34	26-34	---	5.6-7.3	0	0	0	0
	34-42	24-34	---	5.6-7.3	0	0	0	0
	42-60	14-23	---	6.1-7.3	0	0	0	0
Latah-----	0-10	13-19	---	6.1-7.6	0	0	0	0
	10-14	12-19	---	6.1-7.6	0	0	0	0
	14-19	11-17	---	6.6-7.8	0	0	0	0
	19-22	7.1-11	---	6.6-7.8	0	0	0	0
	22-31	24-31	---	6.6-7.8	0	0	0	0
	31-38	26-34	---	6.6-7.8	0	0	0	0
	38-60	23-34	---	6.6-7.8	0	0	0	0
124: Caldwell-----	0-4	14-20	---	6.1-7.3	0	0	0	0
	4-10	13-21	---	6.1-7.3	0	0	0	0
	10-16	13-23	---	6.1-7.3	0	0	0	0
	16-21	16-23	---	6.1-7.3	0	0	0	0
	21-30	15-23	---	6.1-7.3	0	0	0	0
	30-40	15-22	---	6.6-7.3	0	0	0	0
	40-52	15-28	---	6.6-7.3	0	0	0	0
	52-60	14-28	---	6.6-7.3	0	0	0	0
Cald-----	0-7	14-20	---	6.0-7.3	0	0	0	0
	7-13	13-22	---	5.8-7.3	0	0	0	0
	13-17	9.1-22	---	5.8-7.3	0	0	0	0
	17-25	5.6-23	---	6.0-7.3	0	0	0	0
	25-40	16-28	---	6.2-7.3	0	0	0	0
	40-48	16-28	---	6.2-7.3	0	0	0	0
	48-60	16-27	---	6.4-7.8	0	0	0	0
125: Lovell-----	0-8	13-25	---	5.6-7.0	0	0	0	0
	8-18	10-22	---	5.6-7.0	0	0	0	0
	18-22	9.9-19	---	5.6-7.0	0	0	0	0
	22-34	10-19	---	6.1-7.3	0	0	0	0
	34-51	10-17	---	6.6-7.3	0	0	0	0
	51-60	8.8-15	---	6.6-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
125: Porrett-----	0-3	8.2-14	---	5.1-6.5	0	0	0	0
	3-14	---	7.9-22	4.5-6.0	0	0	0	0
	14-21	5.4-11	---	5.1-6.5	0	0	0	0
	21-60	12-19	---	5.6-7.3	0	0	0	0
Aquandic Endoaquepts	0-11	6.2-12	---	5.5-7.3	0	0	0	0
	11-40	6.7-12	---	5.5-7.3	0	0	0	0
	40-60	3.1-7.7	---	5.6-7.3	0	0	0	0
130: Porrett-----	0-3	8.2-14	---	5.1-6.5	0	0	0	0
	3-14	---	7.9-22	4.5-6.0	0	0	0	0
	14-21	5.4-11	---	5.1-6.5	0	0	0	0
	21-60	12-19	---	5.6-7.3	0	0	0	0
136: Lovell-----	0-8	13-25	---	5.6-7.0	0	0	0	0
	8-18	10-22	---	5.6-7.0	0	0	0	0
	18-22	9.9-19	---	5.6-7.0	0	0	0	0
	22-34	10-19	---	6.1-7.3	0	0	0	0
	34-51	10-17	---	6.6-7.3	0	0	0	0
	51-60	8.8-15	---	6.6-7.3	0	0	0	0
Porrett-----	0-3	8.2-14	---	5.1-6.5	0	0	0	0
	3-14	---	7.9-22	4.5-6.0	0	0	0	0
	14-21	5.4-11	---	5.1-6.5	0	0	0	0
	21-60	12-19	---	5.6-7.3	0	0	0	0
141: Miesen-----	0-12	7.6-16	---	5.1-6.5	0	0	0	0
	12-32	7.5-15	---	5.1-6.5	0	0	0	0
	32-60	4.6-13	---	5.1-6.5	0	0	0	0
142: Miesen-----	0-12	7.6-16	---	5.1-6.5	0	0	0	0
	12-32	7.5-15	---	5.1-6.5	0	0	0	0
	32-60	4.6-13	---	5.1-6.5	0	0	0	0
Ramsdell-----	0-8	5.9-15	---	5.6-6.5	0	0	0	0
	8-35	5.6-15	---	5.6-6.5	0	0	0	0
	35-60	4.3-13	---	5.1-6.5	0	0	0	0
143: Miesen, protected, drained-----	0-12	7.6-16	---	5.1-6.5	0	0	0	0
	12-32	7.5-15	---	5.1-6.5	0	0	0	0
	32-60	4.6-13	---	5.1-6.5	0	0	0	0
144: Miesen, protected, drained-----	0-12	7.6-16	---	5.1-6.5	0	0	0	0
	12-32	7.5-15	---	5.1-6.5	0	0	0	0
	32-60	4.6-13	---	5.1-6.5	0	0	0	0
Ramsdell, protected, drained-----	0-8	5.9-15	---	5.6-6.5	0	0	0	0
	8-35	5.6-15	---	5.6-6.5	0	0	0	0
	35-60	4.3-13	---	5.1-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
145: Bellslake, protected, drained--	0-5	7.7-11	---	5.1-6.0	0	0	0	0
	5-11	7.7-11	---	5.1-6.0	0	0	0	0
	11-23	7.3-13	---	5.1-6.0	0	0	0	0
	23-32	7.3-16	---	5.1-6.0	0	0	0	0
	32-40	7.5-16	---	5.1-6.0	0	0	0	0
	40-47	7.5-14	---	5.1-6.0	0	0	0	0
	47-55	86-144	---	5.1-6.0	0	0	0	0
	55-62	86-144	---	5.1-6.0	0	0	0	0
150: Pywell, protected, drained-----	0-16	84-148	---	5.2-6.5	0	0	0	0
	16-65	84-148	---	5.2-6.5	0	0	0	0
155: Ramsdell-----	0-8	5.9-15	---	5.6-6.5	0	0	0	0
	8-35	5.6-15	---	5.6-6.5	0	0	0	0
	35-60	4.3-13	---	5.1-6.5	0	0	0	0
156: Ramsdell, protected, drained-----	0-8	5.9-15	---	5.6-6.5	0	0	0	0
	8-35	5.6-15	---	5.6-6.5	0	0	0	0
	35-60	4.3-13	---	5.1-6.5	0	0	0	0
157: Ramsdell, protected, drained-----	0-8	5.9-15	---	5.6-6.5	0	0	0	0
	8-35	5.6-15	---	5.6-6.5	0	0	0	0
	35-60	4.3-13	---	5.1-6.5	0	0	0	0
DeVoignes, protected, drained--	0-9	---	2.5-5.8	4.5-5.0	0	0	0	0
	9-24	---	7.7-27	4.5-5.0	0	0	0	0
	24-60	---	6.7-12	4.5-5.0	0	0	0	0
158: DeVoignes-----	0-9	---	2.5-5.8	4.5-5.0	0	0	0	0
	9-24	---	7.7-27	4.5-5.0	0	0	0	0
	24-60	---	6.7-12	4.5-5.0	0	0	0	0
Pywell-----	0-16	84-148	---	5.2-6.5	0	0	0	0
	16-65	84-148	---	5.2-6.5	0	0	0	0
200: Blinn, stony surface	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	10-22	---	6.1-7.3	0	0	0	0
	6-12	8.8-21	---	6.1-7.3	0	0	0	0
	12-24	8.2-17	---	6.1-7.3	0	0	0	0
	24-39	6.5-14	---	6.1-7.3	0	0	0	0
	39-40	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
201: Blinn, stony surface	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	10-22	---	6.1-7.3	0	0	0	0
	6-12	8.8-21	---	6.1-7.3	0	0	0	0
	12-24	8.2-17	---	6.1-7.3	0	0	0	0
	24-39	6.5-14	---	6.1-7.3	0	0	0	0
	39-40	---	---	---	---	---	---	---
202: Blinn, stony surface	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	10-22	---	6.1-7.3	0	0	0	0
	6-12	8.8-21	---	6.1-7.3	0	0	0	0
	12-24	8.2-17	---	6.1-7.3	0	0	0	0
	24-39	6.5-14	---	6.1-7.3	0	0	0	0
	39-40	---	---	---	---	---	---	---
Bobbitt, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-9	13-29	---	6.1-7.3	0	0	0	0
	9-23	13-24	---	6.1-7.3	0	0	0	0
	23-33	---	---	---	---	---	---	---
210: Agatha, stony surface	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-7	13-26	---	6.1-7.3	0	0	0	0
	7-11	12-23	---	6.1-7.3	0	0	0	0
	11-20	12-23	---	5.6-7.3	0	0	0	0
	20-32	11-19	---	5.6-7.3	0	0	0	0
	32-38	9.9-20	---	5.6-7.3	0	0	0	0
	38-43	8.9-19	---	5.6-7.3	0	0	0	0
	43-53	---	---	---	---	---	---	---
212: Agatha, stony surface	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-7	13-26	---	6.1-7.3	0	0	0	0
	7-11	12-23	---	6.1-7.3	0	0	0	0
	11-20	12-23	---	5.6-7.3	0	0	0	0
	20-32	11-19	---	5.6-7.3	0	0	0	0
	32-38	9.9-20	---	5.6-7.3	0	0	0	0
	38-43	8.9-19	---	5.6-7.3	0	0	0	0
	43-53	---	---	---	---	---	---	---
230: Lacy, stony surface--	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	9.4-18	---	6.1-7.3	0	0	0	0
	3-10	9.1-18	---	6.1-7.3	0	0	0	0
	10-14	15-21	---	5.6-6.5	0	0	0	0
	14-17	16-24	---	5.6-6.5	0	0	0	0
	17-27	---	---	---	---	---	---	---
Rock outcrop-----	0-60	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
231: Lacy, very stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	9.4-18	---	6.1-7.3	0	0	0	0
	2-4	9.1-18	---	6.1-7.3	0	0	0	0
	4-8	9.7-18	---	6.1-7.3	0	0	0	0
	8-16	15-23	---	5.6-6.5	0	0	0	0
	16-19	20-24	---	5.6-6.5	0	0	0	0
	19-29	---	---	---	---	---	---	---
Rock outcrop-----	0-60	---	---	---	---	---	---	---
232: Lacy, stony surface--	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	9.4-18	---	6.1-7.3	0	0	0	0
	3-10	9.1-18	---	6.1-7.3	0	0	0	0
	10-14	15-21	---	5.6-6.5	0	0	0	0
	14-17	16-24	---	5.6-6.5	0	0	0	0
	17-27	---	---	---	---	---	---	---
Bobbitt, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-9	13-29	---	6.1-7.3	0	0	0	0
	9-23	13-24	---	6.1-7.3	0	0	0	0
	23-33	---	---	---	---	---	---	---
233: Lacy, very stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	9.4-18	---	6.1-7.3	0	0	0	0
	2-4	9.1-18	---	6.1-7.3	0	0	0	0
	4-8	9.7-18	---	6.1-7.3	0	0	0	0
	8-16	15-23	---	5.6-6.5	0	0	0	0
	16-19	20-24	---	5.6-6.5	0	0	0	0
	19-29	---	---	---	---	---	---	---
Bobbitt, very stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	13-29	---	6.1-7.3	0	0	0	0
	4-11	11-23	---	6.1-7.3	0	0	0	0
	11-15	13-20	---	6.1-7.3	0	0	0	0
	15-27	11-21	---	6.1-7.3	0	0	0	0
	27-33	11-21	---	6.1-7.3	0	0	0	0
	33-43	---	---	---	---	---	---	---
250: Dorb, warm, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	15-30	---	6.1-7.3	0	0	0	0
	3-20	15-30	---	6.1-7.3	0	0	0	0
	20-32	5.0-20	---	6.1-7.3	0	0	0	0
	32-48	5.0-20	---	6.1-7.3	0	0	0	0
	48-58	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
255: Shayhill, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	13-26	---	6.1-7.3	0	0	0	0
	3-10	8.8-20	---	6.1-7.3	0	0	0	0
	10-19	8.8-17	---	6.1-7.3	0	0	0	0
	19-28	8.3-15	---	6.1-7.3	0	0	0	0
	28-48	8.9-18	---	5.6-7.3	0	0	0	0
	48-55	6.5-14	---	5.6-6.5	0	0	0	0
	55-64	6.5-12	---	5.6-6.5	0	0	0	0
256: Shayhill, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	13-26	---	6.1-7.3	0	0	0	0
	3-10	8.8-20	---	6.1-7.3	0	0	0	0
	10-19	8.8-17	---	6.1-7.3	0	0	0	0
	19-28	8.3-15	---	6.1-7.3	0	0	0	0
	28-48	8.9-18	---	5.6-7.3	0	0	0	0
	48-55	6.5-14	---	5.6-6.5	0	0	0	0
	55-64	6.5-12	---	5.6-6.5	0	0	0	0
257: Shayhill, dry, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	13-26	---	6.1-7.3	0	0	0	0
	4-11	8.8-20	---	6.1-7.3	0	0	0	0
	11-19	8.8-17	---	6.1-7.3	0	0	0	0
	19-64	8.9-18	---	5.6-7.3	0	0	0	0
260: Seddow-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	9.4-18	---	6.1-7.3	0	0	0	0
	6-10	13-17	---	5.6-6.5	0	0	0	0
	10-16	15-22	---	5.6-6.5	0	0	0	0
	16-24	20-24	---	5.6-6.5	0	0	0	0
	24-32	22-24	---	5.6-6.5	0	0	0	0
	32-45	19-24	---	5.1-6.0	0	0	0	0
	45-55	---	---	---	---	---	---	---
261: Sly, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.1-16	---	6.1-7.3	0	0	0	0
	5-9	8.9-17	---	6.1-7.3	0	0	0	0
	9-29	15-22	---	5.6-6.5	0	0	0	0
	29-60	17-25	---	5.6-6.5	0	0	0	0
Shayhill, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	13-26	---	6.1-7.3	0	0	0	0
	3-11	8.8-20	---	6.1-7.3	0	0	0	0
	11-19	12-21	---	5.6-7.3	0	0	0	0
	19-42	8.9-18	---	5.6-7.3	0	0	0	0
	42-55	6.5-14	---	5.6-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
262: Seddow-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	9.4-18	---	6.1-7.3	0	0	0	0
	6-10	13-17	---	5.6-6.5	0	0	0	0
	10-16	15-22	---	5.6-6.5	0	0	0	0
	16-24	20-24	---	5.6-6.5	0	0	0	0
	24-32	22-24	---	5.6-6.5	0	0	0	0
	32-45	19-24	---	5.1-6.0	0	0	0	0
	45-55	---	---	---	---	---	---	---
Sly, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.1-16	---	6.1-7.3	0	0	0	0
	5-9	8.9-17	---	6.1-7.3	0	0	0	0
	9-29	15-22	---	5.6-6.5	0	0	0	0
	29-60	17-25	---	5.6-6.5	0	0	0	0
300: Taney-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	14-20	---	6.1-7.3	0	0	0	0
	4-15	13-20	---	6.1-7.3	0	0	0	0
	15-22	14-18	---	6.1-7.3	0	0	0	0
	22-29	14-19	---	6.1-7.3	0	0	0	0
	29-31	---	5.4-11	4.5-6.0	0	0	0	0
	31-53	---	12-17	4.5-5.5	0	0	0	0
	53-60	18-29	---	5.6-7.3	0	0	0	0
301: Taney-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	14-20	---	6.1-7.3	0	0	0	0
	4-15	13-20	---	6.1-7.3	0	0	0	0
	15-22	14-18	---	6.1-7.3	0	0	0	0
	22-29	14-19	---	6.1-7.3	0	0	0	0
	29-31	---	5.4-11	4.5-6.0	0	0	0	0
	31-53	---	12-17	4.5-5.5	0	0	0	0
	53-60	18-29	---	5.6-7.3	0	0	0	0
303: Carlinton-----	0-5	---	6.0-10	5.1-6.0	0	0	0	0
	5-10	---	5.9-10	5.1-6.0	0	0	0	0
	10-14	9.7-17	---	5.6-6.5	0	0	0	0
	14-20	10-18	---	5.6-6.5	0	0	0	0
	20-23	7.9-13	---	5.1-6.5	0	0	0	0
	23-30	16-25	---	5.6-6.5	0	0	0	0
	30-53	19-28	---	5.6-7.3	0	0	0	0
	53-60	18-26	---	5.6-7.3	0	0	0	0
Benewah-----	0-6	8.2-21	---	5.6-7.3	0	0	0	0
	6-15	6.3-14	---	5.1-6.5	0	0	0	0
	15-18	---	6.4-14	5.1-6.5	0	0	0	0
	18-23	---	9.1-12	4.5-6.5	0	0	0	0
	23-34	8.0-17	---	4.5-6.5	0	0	0	0
	34-60	---	7.6-13	4.5-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
304: Benewah-----	0-6	8.2-21	---	5.6-7.3	0	0	0	0
	6-15	6.3-14	---	5.1-6.5	0	0	0	0
	15-18	---	6.4-14	5.1-6.5	0	0	0	0
	18-23	---	9.1-12	4.5-6.5	0	0	0	0
	23-34	8.0-17	---	4.5-6.5	0	0	0	0
	34-60	---	7.6-13	4.5-6.5	0	0	0	0
Santa-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.3-15	---	5.6-6.5	0	0	0	0
	4-9	9.7-15	---	5.6-6.5	0	0	0	0
	9-15	10-15	---	5.6-6.5	0	0	0	0
	15-34	7.1-13	---	4.5-6.0	0	0	0	0
	34-44	16-27	---	5.1-6.0	0	0	0	0
	44-60	18-26	---	5.6-6.5	0	0	0	0
310: Santa-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.3-15	---	5.6-6.5	0	0	0	0
	4-9	9.7-15	---	5.6-6.5	0	0	0	0
	9-15	10-15	---	5.6-6.5	0	0	0	0
	15-34	7.1-13	---	4.5-6.0	0	0	0	0
	34-44	16-27	---	5.1-6.0	0	0	0	0
	44-60	18-26	---	5.6-6.5	0	0	0	0
311: Santa-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.3-15	---	5.6-6.5	0	0	0	0
	4-9	9.7-15	---	5.6-6.5	0	0	0	0
	9-15	10-15	---	5.6-6.5	0	0	0	0
	15-34	7.1-13	---	4.5-6.0	0	0	0	0
	34-44	16-27	---	5.1-6.0	0	0	0	0
	44-60	18-26	---	5.6-6.5	0	0	0	0
314: Sharptop-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	8.4-17	---	6.1-7.3	0	0	0	0
	4-9	7.8-17	---	6.1-7.3	0	0	0	0
	9-17	6.8-15	---	5.6-6.5	0	0	0	0
	17-27	8.0-15	---	5.6-6.5	0	0	0	0
	27-42	7.1-15	---	5.6-6.5	0	0	0	0
	42-49	7.3-16	---	5.6-6.5	0	0	0	0
	49-59	---	---	---	---	---	---	---
Santa-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.3-15	---	5.6-6.5	0	0	0	0
	4-9	9.7-15	---	5.6-6.5	0	0	0	0
	9-15	10-15	---	5.6-6.5	0	0	0	0
	15-34	7.1-13	---	4.5-6.0	0	0	0	0
	34-44	16-27	---	5.1-6.0	0	0	0	0
	44-60	18-26	---	5.6-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
315: Setters-----	0-4	14-20	---	5.5-6.0	0	0	0	0
	4-15	15-21	---	5.5-6.0	0	0	0	0
	15-19	13-20	---	5.6-6.5	0	0	0	0
	19-22	10-16	---	5.8-6.5	0	0	0	0
	22-60	26-34	---	6.5-7.5	0	0	0	0
316: Setters-----	0-4	14-20	---	5.3-6.0	0	0	0	0
	4-15	---	10-17	5.1-6.0	0	0	0	0
	15-19	13-20	---	5.6-6.5	0	0	0	0
	19-22	10-16	---	5.6-6.5	0	0	0	0
	22-60	26-34	---	6.5-7.3	0	0	0	0
Taney-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	14-20	---	6.1-7.3	0	0	0	0
	4-15	13-20	---	6.1-7.3	0	0	0	0
	15-22	14-18	---	6.1-7.3	0	0	0	0
	22-29	14-19	---	6.1-7.3	0	0	0	0
	29-31	---	5.4-11	4.5-6.0	0	0	0	0
	31-53	---	12-17	4.5-5.5	0	0	0	0
	53-60	18-29	---	5.6-7.3	0	0	0	0
320: Reggear-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-13	6.5-9.8	---	5.6-7.3	0	0	0	0
	13-24	---	3.6-7.6	4.5-6.0	0	0	0	0
	24-28	---	7.2-9.2	4.5-6.0	0	0	0	0
	28-60	---	7.2-13	4.5-5.5	0	0	0	0
321: Reggear, moist-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-9	6.5-9.8	---	5.6-7.3	0	0	0	0
	9-14	6.4-8.1	---	5.6-7.3	0	0	0	0
	14-22	---	3.6-7.6	4.5-6.0	0	0	0	0
	22-39	---	7.2-9.2	4.5-6.0	0	0	0	0
	39-60	---	7.2-13	4.5-5.5	0	0	0	0
322: Reggear, moist-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-9	6.5-9.8	---	5.6-7.3	0	0	0	0
	9-14	6.4-8.1	---	5.6-7.3	0	0	0	0
	14-22	---	3.6-7.6	4.5-6.0	0	0	0	0
	22-39	---	7.2-9.2	4.5-6.0	0	0	0	0
	39-60	---	7.2-13	4.5-5.5	0	0	0	0
Sly-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.1-16	---	6.1-7.3	0	0	0	0
	5-9	8.9-17	---	6.1-7.3	0	0	0	0
	9-29	15-22	---	5.6-6.5	0	0	0	0
	29-60	17-25	---	5.6-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
323: Bechtel-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.1-14	---	6.1-7.3	0	0	0	0
	4-9	8.9-13	---	5.6-6.5	0	0	0	0
	9-17	12-16	---	5.1-6.5	0	0	0	0
	17-26	12-20	---	5.1-6.5	0	0	0	0
	26-35	14-20	---	5.1-6.5	0	0	0	0
	35-56	---	5.3-12	5.1-6.0	0	0	0	0
	56-66	---	---	---	---	---	---	---
Reggear-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-13	6.5-9.8	---	5.6-7.3	0	0	0	0
	13-24	---	3.6-7.6	4.5-6.0	0	0	0	0
	24-28	---	7.2-9.2	4.5-6.0	0	0	0	0
	28-60	---	7.2-13	4.5-5.5	0	0	0	0
325: Reggear-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-13	6.5-9.8	---	5.6-7.3	0	0	0	0
	13-24	---	3.6-7.6	4.5-6.0	0	0	0	0
	24-28	---	7.2-9.2	4.5-6.0	0	0	0	0
	28-60	---	7.2-13	4.5-5.5	0	0	0	0
Sharptop, basalt substratum-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.0-18	---	6.1-7.3	0	0	0	0
	4-9	7.3-17	---	6.1-7.3	0	0	0	0
	9-12	6.0-15	---	5.6-6.5	0	0	0	0
	12-19	6.8-15	---	5.6-6.5	0	0	0	0
	19-27	8.0-17	---	5.6-6.5	0	0	0	0
	27-41	5.6-11	---	5.6-6.5	0	0	0	0
	41-47	5.6-11	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
326: Reggear-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	6.5-8.8	---	6.1-7.3	0	0	0	0
	5-13	6.5-9.8	---	5.6-7.3	0	0	0	0
	13-24	---	3.6-7.6	4.5-6.0	0	0	0	0
	24-28	---	7.2-9.2	4.5-6.0	0	0	0	0
	28-60	---	7.2-13	4.5-5.5	0	0	0	0
Seddow-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	9.4-18	---	6.1-7.3	0	0	0	0
	6-10	13-17	---	5.6-6.5	0	0	0	0
	10-16	15-22	---	5.6-6.5	0	0	0	0
	16-24	20-24	---	5.6-6.5	0	0	0	0
	24-32	22-24	---	5.6-6.5	0	0	0	0
	32-45	19-24	---	5.1-6.0	0	0	0	0
	45-55	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
330: Carlinton-----	0-5	---	6.0-10	5.1-6.0	0	0	0	0
	5-10	---	5.9-10	5.1-6.0	0	0	0	0
	10-14	9.7-17	---	5.6-6.5	0	0	0	0
	14-20	10-18	---	5.6-6.5	0	0	0	0
	20-23	7.9-13	---	5.1-6.5	0	0	0	0
	23-30	16-25	---	5.6-6.5	0	0	0	0
	30-53	19-28	---	5.6-7.3	0	0	0	0
	53-60	18-26	---	5.6-7.3	0	0	0	0
Carlinton, dry-----	0-5	---	6.0-10	5.1-6.0	0	0	0	0
	5-10	---	5.9-10	5.1-6.0	0	0	0	0
	10-14	9.7-17	---	5.6-6.5	0	0	0	0
	14-20	10-18	---	5.6-6.5	0	0	0	0
	20-23	7.9-13	---	5.1-6.5	0	0	0	0
	23-30	16-25	---	5.6-6.5	0	0	0	0
	30-53	19-28	---	5.6-7.3	0	0	0	0
	53-60	18-26	---	5.6-7.3	0	0	0	0
335: Carlinton, dry-----	0-5	---	6.0-10	5.1-6.0	0	0	0	0
	5-10	---	5.9-10	5.1-6.0	0	0	0	0
	10-14	9.7-17	---	5.6-6.5	0	0	0	0
	14-20	10-18	---	5.6-6.5	0	0	0	0
	20-23	7.9-13	---	5.1-6.5	0	0	0	0
	23-30	16-25	---	5.6-6.5	0	0	0	0
	30-53	19-28	---	5.6-7.3	0	0	0	0
	53-60	18-26	---	5.6-7.3	0	0	0	0
336: Carlinton, dry-----	0-5	---	6.0-10	5.1-6.0	0	0	0	0
	5-10	---	5.9-10	5.1-6.0	0	0	0	0
	10-14	9.7-17	---	5.6-6.5	0	0	0	0
	14-20	10-18	---	5.6-6.5	0	0	0	0
	20-23	7.9-13	---	5.1-6.5	0	0	0	0
	23-30	16-25	---	5.6-6.5	0	0	0	0
	30-53	19-28	---	5.6-7.3	0	0	0	0
	53-60	18-26	---	5.6-7.3	0	0	0	0
Taney-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	14-20	---	6.1-7.3	0	0	0	0
	4-15	13-20	---	6.1-7.3	0	0	0	0
	15-22	14-18	---	6.1-7.3	0	0	0	0
	22-29	14-19	---	6.1-7.3	0	0	0	0
	29-31	---	5.4-11	4.5-6.0	0	0	0	0
	31-53	---	12-17	4.5-5.5	0	0	0	0
	53-60	18-29	---	5.6-7.3	0	0	0	0
340: Arson-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.3-16	---	5.6-6.5	0	0	0	0
	5-9	11-18	---	5.6-6.5	0	0	0	0
	9-15	14-19	---	5.6-6.0	0	0	0	0
	15-38	14-21	---	5.1-6.0	0	0	0	0
	38-43	14-21	---	5.1-6.0	0	0	0	0
	43-57	---	8.3-13	5.1-6.0	0	0	0	0
	57-67	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
340: Lotuspoint-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
341: Sinkler-----	0-0.5	---	20-30	4.5-5.5	0	0	0	0
	0.5-1	---	20-30	4.5-5.5	0	0	0	0
	1-6	8.3-14	---	5.6-6.5	0	0	0	0
	6-12	9.7-15	---	5.6-6.5	0	0	0	0
	12-20	13-17	---	5.6-6.5	0	0	0	0
	20-28	14-20	---	5.6-6.5	0	0	0	0
	28-38	15-21	---	5.6-6.5	0	0	0	0
	38-51	18-25	---	5.6-6.5	0	0	0	0
	51-60	19-28	---	5.6-6.5	0	0	0	0
Arson-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.3-16	---	5.6-6.5	0	0	0	0
	5-9	11-18	---	5.6-6.5	0	0	0	0
	9-15	14-19	---	5.6-6.0	0	0	0	0
	15-38	14-21	---	5.1-6.0	0	0	0	0
	38-43	14-21	---	5.1-6.0	0	0	0	0
	43-57	---	8.3-13	5.1-6.0	0	0	0	0
	57-67	---	---	---	---	---	---	---
342: Sinkler, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-8	8.3-14	---	5.6-6.5	0	0	0	0
	8-14	11-19	---	5.6-6.5	0	0	0	0
	14-20	13-20	---	5.6-6.5	0	0	0	0
	20-33	15-24	---	5.6-6.5	0	0	0	0
	33-44	15-23	---	5.6-6.5	0	0	0	0
	44-62	17-25	---	5.6-6.5	0	0	0	0
Arson, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	9.3-16	---	5.6-6.5	0	0	0	0
	5-9	11-18	---	5.6-6.5	0	0	0	0
	9-15	14-19	---	5.6-6.0	0	0	0	0
	15-38	14-21	---	5.1-6.0	0	0	0	0
	38-43	14-21	---	5.1-6.0	0	0	0	0
	43-57	---	8.3-13	5.1-6.0	0	0	0	0
	57-67	---	---	---	---	---	---	---
350: Southwick-----	0-10	6.6-14	---	5.6-6.5	0	0	0	0
	10-18	6.5-14	---	5.6-6.5	0	0	0	0
	18-28	8.1-14	---	6.1-7.3	0	0	0	0
	28-31	4.3-8.6	---	6.1-7.3	0	0	0	0
	31-49	13-18	---	6.1-7.3	0	0	0	0
	49-54	13-18	---	6.1-7.3	0	0	0	0
	54-70	11-18	---	6.1-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
351: Southwick-----	0-10	6.6-14	---	5.6-6.5	0	0	0	0
	10-18	6.5-14	---	5.6-6.5	0	0	0	0
	18-28	8.1-14	---	6.1-7.3	0	0	0	0
	28-31	4.3-8.6	---	6.1-7.3	0	0	0	0
	31-49	13-18	---	6.1-7.3	0	0	0	0
	49-54	13-18	---	6.1-7.3	0	0	0	0
	54-70	11-18	---	6.1-7.3	0	0	0	0
353: Tensed-----	0-7	---	9.1-16	5.1-6.5	0	0	0	0
	7-12	11-23	---	5.1-6.5	0	0	0	0
	12-22	9.5-21	---	5.6-7.3	0	0	0	0
	22-24	4.6-15	---	5.6-7.3	0	0	0	0
	24-58	11-22	---	5.6-7.3	0	0	0	0
	58-61	8.4-19	---	5.6-7.3	0	0	0	0
Pedee-----	0-10	11-23	---	5.2-6.2	0	0	0	0
	10-19	9.0-20	---	5.2-6.2	0	0	0	0
	19-22	4.3-11	---	5.2-6.2	0	0	0	0
	22-31	---	6.8-14	4.5-5.6	0	0	0	0
	31-60	7.1-19	---	5.1-7.3	0	0	0	0
354: Tensed-----	0-7	---	9.1-16	5.1-6.5	0	0	0	0
	7-12	11-23	---	5.1-6.5	0	0	0	0
	12-22	9.5-21	---	5.6-7.3	0	0	0	0
	22-24	4.6-15	---	5.6-7.3	0	0	0	0
	24-58	11-22	---	5.6-7.3	0	0	0	0
	58-61	8.4-19	---	5.6-7.3	0	0	0	0
Pedee-----	0-10	11-23	---	5.2-6.2	0	0	0	0
	10-19	9.0-20	---	5.2-6.2	0	0	0	0
	19-22	4.3-11	---	5.2-6.2	0	0	0	0
	22-31	---	6.8-14	4.5-5.6	0	0	0	0
	31-60	7.1-19	---	5.1-7.3	0	0	0	0
355: Southwick-----	0-10	6.6-14	---	5.6-6.5	0	0	0	0
	10-18	6.5-14	---	5.6-6.5	0	0	0	0
	18-28	8.1-14	---	6.1-7.3	0	0	0	0
	28-31	4.3-8.6	---	6.1-7.3	0	0	0	0
	31-49	13-18	---	6.1-7.3	0	0	0	0
	49-54	13-18	---	6.1-7.3	0	0	0	0
	54-70	11-18	---	6.1-7.3	0	0	0	0
Driscoll-----	0-5	13-22	---	5.6-6.5	0	0	0	0
	5-10	13-21	---	5.6-6.5	0	0	0	0
	10-17	15-21	---	5.6-6.5	0	0	0	0
	17-24	12-20	---	6.1-7.3	0	0	0	0
	24-26	8.4-19	---	6.1-7.3	0	0	0	0
	26-42	23-36	---	6.1-7.3	0	0	0	0
	42-49	23-34	---	6.1-7.3	0	0	0	0
	49-60	21-30	---	6.6-7.8	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
356: Southwick-----	0-10	6.6-14	---	5.6-6.5	0	0	0	0
	10-18	6.5-14	---	5.6-6.5	0	0	0	0
	18-28	8.1-14	---	6.1-7.3	0	0	0	0
	28-31	4.3-8.6	---	6.1-7.3	0	0	0	0
	31-49	13-18	---	6.1-7.3	0	0	0	0
	49-54	13-18	---	6.1-7.3	0	0	0	0
	54-70	11-18	---	6.1-7.3	0	0	0	0
Driscoll-----	0-5	13-22	---	5.6-6.5	0	0	0	0
	5-10	13-21	---	5.6-6.5	0	0	0	0
	10-17	15-21	---	5.6-6.5	0	0	0	0
	17-24	12-20	---	6.1-7.3	0	0	0	0
	24-26	8.4-19	---	6.1-7.3	0	0	0	0
	26-42	23-36	---	6.1-7.3	0	0	0	0
	42-49	23-34	---	6.1-7.3	0	0	0	0
	49-60	21-30	---	6.6-7.8	0	0	0	0
360: Larkin-----	0-6	13-22	---	5.6-6.5	0	0	0	0
	6-14	13-21	---	5.6-6.5	0	0	0	0
	14-22	15-24	---	6.1-7.3	0	0	0	0
	22-39	17-23	---	6.1-7.3	0	0	0	0
	39-60	19-27	---	6.1-7.3	0	0	0	0
361: Larkin-----	0-6	13-22	---	5.6-6.5	0	0	0	0
	6-14	13-21	---	5.6-6.5	0	0	0	0
	14-22	15-24	---	6.1-7.3	0	0	0	0
	22-39	17-23	---	6.1-7.3	0	0	0	0
	39-60	19-27	---	6.1-7.3	0	0	0	0
363: Larkin-----	0-6	13-22	---	5.6-6.5	0	0	0	0
	6-14	13-21	---	5.6-6.5	0	0	0	0
	14-22	15-24	---	6.1-7.3	0	0	0	0
	22-39	17-23	---	6.1-7.3	0	0	0	0
	39-60	19-27	---	6.1-7.3	0	0	0	0
Driscoll-----	0-5	13-22	---	5.6-6.5	0	0	0	0
	5-10	13-21	---	5.6-6.5	0	0	0	0
	10-17	15-21	---	5.6-6.5	0	0	0	0
	17-24	12-20	---	6.1-7.3	0	0	0	0
	24-26	8.4-19	---	6.1-7.3	0	0	0	0
	26-42	23-36	---	6.1-7.3	0	0	0	0
	42-49	23-34	---	6.1-7.3	0	0	0	0
	49-60	21-30	---	6.6-7.8	0	0	0	0
364: Larkin-----	0-6	13-22	---	5.6-6.5	0	0	0	0
	6-14	13-21	---	5.6-6.5	0	0	0	0
	14-22	15-24	---	6.1-7.3	0	0	0	0
	22-39	17-23	---	6.1-7.3	0	0	0	0
	39-60	19-27	---	6.1-7.3	0	0	0	0
Southwick-----	0-10	6.6-14	---	5.6-6.5	0	0	0	0
	10-18	6.5-14	---	5.6-6.5	0	0	0	0
	18-28	8.1-14	---	6.1-7.3	0	0	0	0
	28-31	4.3-8.6	---	6.1-7.3	0	0	0	0
	31-49	13-18	---	6.1-7.3	0	0	0	0
	49-54	13-18	---	6.1-7.3	0	0	0	0
	54-70	11-18	---	6.1-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
367:								
Larkin-----	0-6	13-22	---	5.6-6.5	0	0	0	0
	6-14	13-21	---	5.6-6.5	0	0	0	0
	14-22	15-24	---	6.1-7.3	0	0	0	0
	22-39	17-23	---	6.1-7.3	0	0	0	0
	39-60	19-27	---	6.1-7.3	0	0	0	0
Driscoll-----	0-5	13-22	---	5.6-6.5	0	0	0	0
	5-10	13-21	---	5.6-6.5	0	0	0	0
	10-17	15-21	---	5.6-6.5	0	0	0	0
	17-24	12-20	---	6.1-7.3	0	0	0	0
	24-26	8.4-19	---	6.1-7.3	0	0	0	0
	26-42	23-36	---	6.1-7.3	0	0	0	0
	42-49	23-34	---	6.1-7.3	0	0	0	0
	49-60	21-30	---	6.6-7.8	0	0	0	0
400:								
Driscoll-----	0-5	13-22	---	5.6-6.5	0	0	0	0
	5-10	13-21	---	5.6-6.5	0	0	0	0
	10-17	15-21	---	5.6-6.5	0	0	0	0
	17-24	12-20	---	6.1-7.3	0	0	0	0
	24-26	8.4-19	---	6.1-7.3	0	0	0	0
	26-42	23-36	---	6.1-7.3	0	0	0	0
	42-49	23-34	---	6.1-7.3	0	0	0	0
	49-60	21-30	---	6.6-7.8	0	0	0	0
405:								
Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
406:								
Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
410: Palouse-----	0-11	13-19	---	5.1-6.0	0	0	0	0
	11-18	13-20	---	6.1-7.3	0	0	0	0
	18-26	13-21	---	6.6-7.8	0	0	0	0
	26-60	15-22	---	6.6-7.8	0	0	0	0
Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
411: Palouse-----	0-11	13-19	---	5.1-6.0	0	0	0	0
	11-18	13-20	---	6.1-7.3	0	0	0	0
	18-26	13-21	---	6.6-7.8	0	0	0	0
	26-60	15-22	---	6.6-7.8	0	0	0	0
414: Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
415: Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
Tilma-----	0-8	13-18	---	5.6-7.3	0	0	0	0
	8-14	13-18	---	5.6-7.3	0	0	0	0
	14-20	13-16	---	6.1-7.3	0	0	0	0
	20-23	8.5-15	---	6.1-7.3	0	0	0	0
	23-30	26-34	---	5.6-7.3	0	0	0	0
	30-34	26-34	---	5.6-7.3	0	0	0	0
	34-42	24-34	---	5.6-7.3	0	0	0	0
	42-60	14-23	---	6.1-7.3	0	0	0	0
416: Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
416: Thatuna-----	0-6	14-21	---	5.6-7.3	0	0	0	0
	6-12	14-20	---	5.6-7.3	0	0	0	0
	12-19	14-20	---	5.6-7.3	0	0	0	0
	19-28	15-21	---	6.1-7.3	0	0	0	0
	28-35	8.5-13	---	6.1-7.3	0	0	0	0
	35-43	18-26	---	6.1-7.3	0	0	0	0
	43-52	18-26	---	6.1-7.3	0	0	0	0
	52-60	18-26	---	6.1-7.3	0	0	0	0
417: Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
Palouse-----	0-11	13-19	---	5.1-6.0	0	0	0	0
	11-18	13-20	---	6.1-7.3	0	0	0	0
	18-26	13-21	---	6.6-7.8	0	0	0	0
	26-60	15-22	---	6.6-7.8	0	0	0	0
420: Garfield-----	0-7	21-29	---	5.6-7.3	0	0	0	0
	7-19	26-34	---	6.6-7.8	0	0	0	0
	19-32	26-34	---	6.6-7.8	0	0	0	0
	32-45	16-30	---	6.6-7.8	0	0	0	0
	45-60	16-30	---	6.6-7.8	0	0	0	0
Tilma-----	0-8	13-18	---	5.6-7.3	0	0	0	0
	8-14	13-18	---	5.6-7.3	0	0	0	0
	14-20	13-16	---	6.1-7.3	0	0	0	0
	20-23	8.5-15	---	6.1-7.3	0	0	0	0
	23-30	26-34	---	5.6-7.3	0	0	0	0
	30-34	26-34	---	5.6-7.3	0	0	0	0
	34-42	24-34	---	5.6-7.3	0	0	0	0
	42-60	14-23	---	6.1-7.3	0	0	0	0
421: Naff-----	0-8	13-21	---	5.6-7.1	0	0	0	0
	8-17	17-22	---	6.1-7.3	0	0	0	0
	17-26	16-24	---	6.1-7.3	0	0	0	0
	26-61	19-27	---	6.1-7.6	0	0	0	0
	61-80	19-27	---	6.1-7.6	0	0	0	0
Garfield-----	0-5	15-21	---	5.6-7.3	0	0	0	0
	5-8	15-25	---	5.6-7.3	0	0	0	0
	8-19	26-34	---	6.6-7.8	0	0	0	0
	19-32	26-34	---	6.6-7.8	0	0	0	0
	32-45	16-30	---	6.6-7.8	0	0	0	0
	45-60	16-30	---	6.6-7.8	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
500:								
Hobo-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-8	10-20	---	6.1-7.3	0	0	0	0
	8-18	10-15	---	6.1-7.3	0	0	0	0
	18-22	10-15	---	5.6-6.5	0	0	0	0
	22-30	10-15	---	5.6-6.5	0	0	0	0
	30-44	10-16	---	5.6-6.5	0	0	0	0
	44-60	5.0-10	---	5.1-6.5	0	0	0	0
Threebear-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-6.5	0	0	0	0
	4-9	10-25	---	6.1-6.5	0	0	0	0
	9-20	10-25	---	6.1-6.5	0	0	0	0
	20-24	---	5.5-11	5.1-6.5	0	0	0	0
	24-34	---	8.4-11	4.5-6.0	0	0	0	0
	34-55	---	11-16	4.0-5.5	0	0	0	0
	55-60	---	11-16	4.0-5.5	0	0	0	0
501:								
Hobo, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-8	10-20	---	6.1-7.3	0	0	0	0
	8-18	10-15	---	6.1-7.3	0	0	0	0
	18-22	10-15	---	5.6-6.5	0	0	0	0
	22-30	10-15	---	5.6-6.5	0	0	0	0
	30-44	10-16	---	5.6-6.5	0	0	0	0
	44-60	5.0-10	---	5.1-6.5	0	0	0	0
Threebear, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	15-30	---	6.1-6.5	0	0	0	0
	3-7	10-25	---	6.1-6.5	0	0	0	0
	7-18	10-25	---	6.1-6.5	0	0	0	0
	18-29	---	5.5-11	5.1-6.5	0	0	0	0
	29-36	---	8.4-11	4.5-6.0	0	0	0	0
	36-48	---	11-16	4.0-5.5	0	0	0	0
	48-60	---	11-16	4.0-5.5	0	0	0	0
510:								
Honeyjones-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
600: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-60	---	---	---	---	---	---	---
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
601: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
McCrosket-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-12	11-28	---	6.1-7.3	0	0	0	0
	12-32	8.8-23	---	6.1-7.3	0	0	0	0
	32-42	4.0-14	---	5.6-6.5	0	0	0	0
	42-52	---	---	---	---	---	---	---
605: Benewah-----	0-6	8.2-21	---	5.6-7.3	0	0	0	0
	6-15	6.3-14	---	5.1-6.5	0	0	0	0
	15-18	---	6.4-14	5.1-6.5	0	0	0	0
	18-23	---	9.1-12	4.5-6.5	0	0	0	0
	23-34	8.0-17	---	4.5-6.5	0	0	0	0
	34-60	---	7.6-13	4.5-6.5	0	0	0	0
Rasser-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	11-21	---	5.2-6.5	0	0	0	0
	4-11	7.7-18	---	5.2-6.5	0	0	0	0
	11-20	8.6-16	---	5.2-6.5	0	0	0	0
	20-41	9.6-18	---	5.2-6.5	0	0	0	0
	41-60	9.5-17	---	5.2-6.5	0	0	0	0
606: Benewah-----	0-6	8.2-21	---	5.6-7.3	0	0	0	0
	6-15	6.3-14	---	5.1-6.5	0	0	0	0
	15-18	---	6.4-14	5.1-6.5	0	0	0	0
	18-23	---	9.1-12	4.5-6.5	0	0	0	0
	23-34	8.0-17	---	4.5-6.5	0	0	0	0
	34-60	---	7.6-13	4.5-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
606: Rasser-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	11-21	---	5.2-6.5	0	0	0	0
	4-11	7.7-18	---	5.2-6.5	0	0	0	0
	11-20	8.6-16	---	5.2-6.5	0	0	0	0
	20-41	9.6-18	---	5.2-6.5	0	0	0	0
	41-60	9.5-17	---	5.2-6.5	0	0	0	0
610: Schumacher-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-8	14-21	---	6.6-7.8	0	0	0	0
	8-20	15-22	---	6.3-7.8	0	0	0	0
	20-27	17-22	---	6.3-7.8	0	0	0	0
	27-34	17-24	---	6.3-7.8	0	0	0	0
	34-41	20-24	---	6.3-7.8	0	0	0	0
	41-47	19-24	---	6.3-7.8	0	0	0	0
	47-57	---	---	---	---	---	---	---
611: Schumacher-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-8	14-21	---	6.6-7.8	0	0	0	0
	8-20	15-22	---	6.1-7.6	0	0	0	0
	20-27	17-22	---	6.1-7.6	0	0	0	0
	27-34	17-24	---	6.1-7.6	0	0	0	0
	34-41	20-24	---	6.1-7.6	0	0	0	0
	41-47	19-24	---	6.1-7.6	0	0	0	0
	47-57	---	---	---	---	---	---	---
Tekoa-----	0-7	9.3-18	---	6.5-7.3	0	0	0	0
	7-13	11-19	---	6.5-7.0	0	0	0	0
	13-17	13-21	---	6.1-6.5	0	0	0	0
	17-27	17-25	---	6.1-6.5	0	0	0	0
	27-33	20-28	---	6.1-6.5	0	0	0	0
	33-43	---	---	---	---	---	---	---
612: Libertybutte-----	0-4	9.1-18	---	6.1-7.3	0	0	0	0
	4-11	13-22	---	6.1-7.3	0	0	0	0
	11-16	13-21	---	6.1-7.3	0	0	0	0
	16-19	---	---	---	---	---	---	---
	19-29	---	---	---	---	---	---	---
Tekoa-----	0-7	9.3-18	---	6.5-7.3	0	0	0	0
	7-13	11-19	---	6.5-7.0	0	0	0	0
	13-17	13-21	---	6.1-6.5	0	0	0	0
	17-27	17-25	---	6.1-6.5	0	0	0	0
	27-33	20-28	---	6.1-6.5	0	0	0	0
	33-43	---	---	---	---	---	---	---
613: Ardenvoir, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	11-30	---	6.1-7.3	0	0	0	0
	3-11	8.4-24	---	6.1-7.3	0	0	0	0
	11-18	6.2-18	---	6.1-7.3	0	0	0	0
	18-32	4.0-13	---	5.6-7.3	0	0	0	0
	32-41	---	2.7-5.6	5.1-6.5	0	0	0	0
	41-60	---	2.7-5.6	5.1-6.5	0	0	0	0
	60-70	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
613: Lotuspoint-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
614: Ardenvoir, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	11-30	---	6.1-7.3	0	0	0	0
	3-11	8.4-24	---	6.1-7.3	0	0	0	0
	11-18	6.2-18	---	6.1-7.3	0	0	0	0
	18-32	4.0-13	---	5.6-7.3	0	0	0	0
	32-41	---	2.7-5.6	5.1-6.5	0	0	0	0
	41-60	---	2.7-5.6	5.1-6.5	0	0	0	0
	60-70	---	---	---	---	---	---	---
Lotuspoint-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
617: Tekoa-----	0-7	9.3-18	---	6.5-7.3	0	0	0	0
	7-13	11-19	---	6.5-7.0	0	0	0	0
	13-17	13-21	---	6.1-6.5	0	0	0	0
	17-27	17-25	---	6.1-6.5	0	0	0	0
	27-33	20-28	---	6.1-6.5	0	0	0	0
	33-43	---	---	---	---	---	---	---
621: Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
625: Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
625: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
650: Grangemont-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	15-30	---	6.1-7.3	0	0	0	0
	4-10	10-25	---	6.1-7.3	0	0	0	0
	10-18	10-15	---	5.1-6.5	0	0	0	0
	18-25	10-15	---	5.1-6.5	0	0	0	0
	25-34	12-18	---	5.1-5.5	0	0	0	0
	34-42	12-18	---	5.1-5.5	0	0	0	0
	42-53	---	6.0-12	5.1-6.0	0	0	0	0
	53-63	---	6.8-12	5.1-6.0	0	0	0	0
651: Kingspeak-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	8.4-22	---	6.1-7.3	0	0	0	0
	3-10	6.2-18	---	6.1-7.3	0	0	0	0
	10-30	5.3-12	---	5.6-6.5	0	0	0	0
	30-60	6.5-14	---	5.6-6.5	0	0	0	0
Shayhill, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	13-26	---	6.1-7.3	0	0	0	0
	3-10	8.8-20	---	6.1-7.3	0	0	0	0
	10-19	8.8-17	---	6.1-7.3	0	0	0	0
	19-28	8.3-15	---	6.1-7.3	0	0	0	0
	28-48	8.9-18	---	5.6-7.3	0	0	0	0
	48-55	6.5-14	---	5.6-6.5	0	0	0	0
	55-64	6.5-12	---	5.6-6.5	0	0	0	0
652: Kingspeak-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	8.4-22	---	6.1-7.3	0	0	0	0
	3-10	6.2-18	---	6.1-7.3	0	0	0	0
	10-30	5.3-12	---	5.6-6.5	0	0	0	0
	30-60	6.5-14	---	5.6-6.5	0	0	0	0
653: Kingspeak, cool-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	8.4-22	---	6.1-7.3	0	0	0	0
	3-10	6.2-18	---	6.1-7.3	0	0	0	0
	10-30	5.3-12	---	5.6-6.5	0	0	0	0
	30-60	6.5-14	---	5.6-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
655: Tigley, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.1-14	---	5.6-7.0	0	0	0	0
	4-9	8.9-16	---	5.6-7.0	0	0	0	0
	9-34	13-18	---	5.6-7.0	0	0	0	0
	34-60	14-20	---	5.6-7.0	0	0	0	0
656: Kingspeak, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	8.4-22	---	6.1-7.3	0	0	0	0
	3-10	6.2-18	---	6.1-7.3	0	0	0	0
	10-30	5.3-12	---	5.6-6.5	0	0	0	0
	30-60	6.5-14	---	5.6-6.5	0	0	0	0
660: Threebear-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-6.5	0	0	0	0
	4-9	10-25	---	6.1-6.5	0	0	0	0
	9-20	10-25	---	6.1-6.5	0	0	0	0
	20-24	---	5.5-11	5.1-6.5	0	0	0	0
	24-34	---	8.4-11	4.5-6.0	0	0	0	0
	34-55	---	11-16	4.0-5.5	0	0	0	0
	55-60	---	11-16	4.0-5.5	0	0	0	0
662: Threebear, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	15-30	---	6.1-6.5	0	0	0	0
	3-7	10-25	---	6.1-6.5	0	0	0	0
	7-18	10-25	---	6.1-6.5	0	0	0	0
	18-29	---	5.5-11	5.1-6.5	0	0	0	0
	29-36	---	8.4-11	4.5-6.0	0	0	0	0
	36-48	---	11-16	4.0-5.5	0	0	0	0
	48-60	---	11-16	4.0-5.5	0	0	0	0
663: Threebear, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	15-30	---	6.1-6.5	0	0	0	0
	3-7	10-25	---	6.1-6.5	0	0	0	0
	7-18	10-25	---	6.1-6.5	0	0	0	0
	18-29	---	5.5-11	5.1-6.5	0	0	0	0
	29-36	---	8.4-11	4.5-6.0	0	0	0	0
	36-48	---	11-16	4.0-5.5	0	0	0	0
	48-60	---	11-16	4.0-5.5	0	0	0	0
Porrett-----	0-3	8.2-14	---	5.1-6.5	0	0	0	0
	3-14	---	7.9-22	4.5-6.0	0	0	0	0
	14-21	5.4-11	---	5.1-6.5	0	0	0	0
	21-60	12-19	---	5.6-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
665: Grangemont, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	15-30	---	6.1-7.3	0	0	0	0
	4-10	10-25	---	6.1-7.3	0	0	0	0
	10-18	10-15	---	5.1-6.5	0	0	0	0
	18-25	10-15	---	5.1-6.5	0	0	0	0
	25-34	12-18	---	5.1-5.5	0	0	0	0
	34-42	12-18	---	5.1-5.5	0	0	0	0
	42-53	---	6.0-12	5.1-6.0	0	0	0	0
	53-63	---	6.8-12	5.1-6.0	0	0	0	0
670: Honeyjones, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
671: Honeyjones-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
680: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
681:								
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
700:								
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
701:								
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
McCrosket-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-12	11-28	---	6.1-7.3	0	0	0	0
	12-32	8.8-23	---	6.1-7.3	0	0	0	0
	32-42	4.0-14	---	5.6-6.5	0	0	0	0
	42-52	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
703: Ardenvoir, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	11-30	---	6.1-7.3	0	0	0	0
	3-11	8.4-24	---	6.1-7.3	0	0	0	0
	11-18	6.2-18	---	6.1-7.3	0	0	0	0
	18-32	4.0-13	---	5.6-7.3	0	0	0	0
	32-41	---	2.7-5.6	5.1-6.5	0	0	0	0
	41-60	---	2.7-5.6	5.1-6.5	0	0	0	0
	60-70	---	---	---	---	---	---	---
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-60	---	---	---	---	---	---	---
704: Ardenvoir, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	11-30	---	6.1-7.3	0	0	0	0
	3-11	8.4-24	---	6.1-7.3	0	0	0	0
	11-18	6.2-18	---	6.1-7.3	0	0	0	0
	18-32	4.0-13	---	5.6-7.3	0	0	0	0
	32-41	---	2.7-5.6	5.1-6.5	0	0	0	0
	41-60	---	2.7-5.6	5.1-6.5	0	0	0	0
	60-70	---	---	---	---	---	---	---
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-60	---	---	---	---	---	---	---
705: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
Rasser-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	11-21	---	5.2-6.5	0	0	0	0
	4-11	7.7-18	---	5.2-6.5	0	0	0	0
	11-20	8.6-16	---	5.2-6.5	0	0	0	0
	20-41	9.6-18	---	5.2-6.5	0	0	0	0
	41-60	9.5-17	---	5.2-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
706: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
707: Huckle, dry-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
710: McCrosket-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-12	11-28	---	6.1-7.3	0	0	0	0
	12-32	8.8-23	---	6.1-7.3	0	0	0	0
	32-42	4.0-14	---	5.6-6.5	0	0	0	0
	42-52	---	---	---	---	---	---	---
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
711: McCrosket-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-12	11-28	---	6.1-7.3	0	0	0	0
	12-32	8.8-23	---	6.1-7.3	0	0	0	0
	32-42	4.0-14	---	5.6-6.5	0	0	0	0
	42-52	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
711: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
712: McCrosket-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-12	11-28	---	6.1-7.3	0	0	0	0
	12-32	8.8-23	---	6.1-7.3	0	0	0	0
	32-42	4.0-14	---	5.6-6.5	0	0	0	0
	42-52	---	---	---	---	---	---	---
Tekoa-----	0-7	9.3-18	---	6.5-7.3	0	0	0	0
	7-13	11-19	---	6.5-7.0	0	0	0	0
	13-17	13-21	---	6.1-6.5	0	0	0	0
	17-27	17-25	---	6.1-6.5	0	0	0	0
	27-33	20-28	---	6.1-6.5	0	0	0	0
	33-43	---	---	---	---	---	---	---
716: Ahhs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
720: Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
721: Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
721: Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
735: Lotuspoint, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
736: Lotuspoint, stony surface-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
Rock outcrop-----	0-60	---	---	---	---	---	---	---
756: Tigley-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.1-14	---	5.6-7.0	0	0	0	0
	4-9	8.9-16	---	5.6-7.0	0	0	0	0
	9-34	13-18	---	5.6-7.0	0	0	0	0
	34-60	14-20	---	5.6-7.0	0	0	0	0
757: Hugus, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-9	10-20	---	6.1-7.3	0	0	0	0
	9-20	10-15	---	6.1-7.3	0	0	0	0
	20-39	10-15	---	5.6-6.5	0	0	0	0
	39-55	10-15	---	5.6-6.5	0	0	0	0
	55-63	10-15	---	5.6-6.5	0	0	0	0
758: Tigley, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	9.1-14	---	5.6-7.0	0	0	0	0
	4-9	8.9-16	---	5.6-7.0	0	0	0	0
	9-34	13-18	---	5.6-7.0	0	0	0	0
	34-60	14-20	---	5.6-7.0	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
758: Hugus-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-9	10-20	---	6.1-7.3	0	0	0	0
	9-20	10-15	---	6.1-7.3	0	0	0	0
	20-31	10-15	---	5.6-6.5	0	0	0	0
	31-47	10-15	---	5.6-6.5	0	0	0	0
	47-60	10-15	---	5.6-6.5	0	0	0	0
765: Saint Maries-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	11-27	---	6.1-7.3	0	0	0	0
	4-9	6.2-16	---	6.1-7.3	0	0	0	0
	9-22	4.9-11	---	6.1-7.3	0	0	0	0
	22-28	4.3-10	---	6.1-7.3	0	0	0	0
	28-38	2.9-8.6	---	5.1-6.5	0	0	0	0
	38-47	2.9-7.7	---	5.1-6.5	0	0	0	0
	47-60	2.9-7.7	---	5.1-6.5	0	0	0	0
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
770: Pinecreek-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-12	20-30	---	6.1-7.3	0	0	0	0
	12-19	10-25	---	6.1-7.3	0	0	0	0
	19-24	10-25	---	6.1-7.3	0	0	0	0
	24-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-70	1.0-5.0	---	5.1-6.5	0	0	0	0
771: Honeyjones, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
772: Honeyjones, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
772: Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
773: Honeyjones, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
774: Pinecreek, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-12	20-30	---	6.1-7.3	0	0	0	0
	12-19	10-25	---	6.1-7.3	0	0	0	0
	19-24	10-25	---	6.1-7.3	0	0	0	0
	24-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-70	1.0-5.0	---	5.1-6.5	0	0	0	0
775: Pinecreek, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-12	20-30	---	6.1-7.3	0	0	0	0
	12-19	10-25	---	6.1-7.3	0	0	0	0
	19-24	10-25	---	6.1-7.3	0	0	0	0
	24-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-70	1.0-5.0	---	5.1-6.5	0	0	0	0
776: Cassyhill-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	11-24	---	6.1-7.3	0	0	0	0
	7-11	7.9-18	---	5.6-6.5	0	0	0	0
	11-14	4.2-14	---	5.1-6.0	0	0	0	0
	14-24	---	---	---	---	---	---	---
777: Boulder creek, warm---	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	20-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-17	5.0-10	---	6.1-7.3	0	0	0	0
	17-25	2.0-8.0	---	6.1-7.3	0	0	0	0
	25-33	2.0-8.0	---	6.1-7.3	0	0	0	0
	33-40	2.0-5.0	---	6.1-7.3	0	0	0	0
	40-55	1.0-5.0	---	5.6-7.3	0	0	0	0
	55-60	1.0-5.0	---	5.6-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
778:								
Cassyhill-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	11-24	---	6.1-7.3	0	0	0	0
	7-11	7.9-18	---	5.6-6.5	0	0	0	0
	11-14	4.2-14	---	5.1-6.0	0	0	0	0
	14-24	---	---	---	---	---	---	---
Lotuspoint-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
779:								
Boulder creek-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-8	10-20	---	6.1-7.3	0	0	0	0
	8-17	5.0-10	---	6.1-7.3	0	0	0	0
	17-33	2.0-8.0	---	5.6-7.3	0	0	0	0
	33-43	1.0-5.0	---	5.1-6.5	0	0	0	0
	43-60	1.0-5.0	---	5.1-6.5	0	0	0	0
	60-64	1.0-5.0	---	5.1-6.5	0	0	0	0
780:								
Ardenvoir-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	11-30	---	6.1-7.3	0	0	0	0
	6-11	6.2-18	---	6.1-7.3	0	0	0	0
	11-19	4.3-13	---	6.1-7.3	0	0	0	0
	19-39	2.8-6.9	---	5.6-6.5	0	0	0	0
	39-48	2.8-6.9	---	5.6-6.5	0	0	0	0
	48-58	---	---	---	---	---	---	---
Huckle-----	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	---	20-30	4.5-5.5	0	0	0	0
	3-4	15-30	---	6.1-7.3	0	0	0	0
	4-8	10-20	---	6.1-7.3	0	0	0	0
	8-19	10-20	---	6.1-7.3	0	0	0	0
	19-28	3.0-10	---	5.6-7.3	0	0	0	0
	28-38	1.0-5.0	---	5.6-6.5	0	0	0	0
	38-47	1.0-5.0	---	5.6-6.5	0	0	0	0
	47-57	---	---	---	---	---	---	---
Saint Maries, dry----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-5	11-27	---	6.1-7.3	0	0	0	0
	5-9	8.4-19	---	6.1-7.3	0	0	0	0
	9-17	4.9-11	---	6.1-7.3	0	0	0	0
	17-24	4.3-10	---	6.1-7.3	0	0	0	0
	24-32	3.4-9.5	---	6.1-7.3	0	0	0	0
	32-50	2.9-7.7	---	5.1-6.5	0	0	0	0
	50-60	2.9-7.7	---	5.1-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
781:								
Ahrs, moist-----	0-3	---	20-30	4.5-5.5	0	0	0	0
	3-12	15-30	---	5.1-6.0	0	0	0	0
	12-22	10-20	---	5.6-6.5	0	0	0	0
	22-35	3.0-5.0	---	5.6-6.5	0	0	0	0
	35-48	2.0-5.0	---	5.6-6.5	0	0	0	0
	48-60	1.0-4.0	---	5.6-6.5	0	0	0	0
Honeyjones, warm-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
782:								
Ardenvoir, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	11-30	---	6.1-7.3	0	0	0	0
	3-11	8.4-24	---	6.1-7.3	0	0	0	0
	11-18	6.2-18	---	6.1-7.3	0	0	0	0
	18-32	4.0-13	---	5.6-7.3	0	0	0	0
	32-41	---	2.7-5.6	5.1-6.5	0	0	0	0
	41-60	---	2.7-5.6	5.1-6.5	0	0	0	0
	60-70	---	---	---	---	---	---	---
Cassychill-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	11-24	---	6.1-7.3	0	0	0	0
	7-11	7.9-18	---	5.6-6.5	0	0	0	0
	11-14	4.2-14	---	5.1-6.0	0	0	0	0
	14-24	---	---	---	---	---	---	---
784:								
Pinecreek, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-12	20-30	---	6.1-7.3	0	0	0	0
	12-19	10-25	---	6.1-7.3	0	0	0	0
	19-24	10-25	---	6.1-7.3	0	0	0	0
	24-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-70	1.0-5.0	---	5.1-6.5	0	0	0	0
Lotuspoint-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-4	20-30	---	6.1-7.3	0	0	0	0
	4-10	15-25	---	5.6-7.3	0	0	0	0
	10-16	1.0-5.0	---	5.6-6.5	0	0	0	0
	16-26	1.0-5.0	---	5.6-6.5	0	0	0	0
	26-36	---	---	---	---	---	---	---
791:								
Latour-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	15-30	---	5.6-7.3	0	0	0	0
	3-14	10-25	---	5.6-7.3	0	0	0	0
	14-40	10-20	---	5.6-7.3	0	0	0	0
	40-60	5.0-15	---	5.6-7.3	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
800: Rock outcrop-----	0-60	---	---	---	---	---	---	---
801: Pits, gravel-----	0-60	---	---	---	---	---	---	---
802: Kingspeak-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	8.4-22	---	6.1-7.3	0	0	0	0
	3-10	6.2-18	---	6.1-7.3	0	0	0	0
	10-30	5.3-12	---	5.6-6.5	0	0	0	0
	30-60	6.5-14	---	5.6-6.5	0	0	0	0
Urban land-----	---	---	---	---	---	---	---	---
900: Water-----	---	---	---	---	---	---	---	---
901: Aquandic Endoaquepts	0-11	6.2-12	---	5.5-7.3	0	0	0	0
	11-40	6.7-12	---	5.5-7.3	0	0	0	0
	40-60	3.1-7.7	---	5.6-7.3	0	0	0	0
Aquic Udifluvents----	0-8	6.1-12	---	5.6-7.3	0	0	0	0
	8-22	4.0-12	---	5.6-7.3	0	0	0	0
	22-60	1.6-7.4	---	5.6-7.3	0	0	0	0
902: Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
903: Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
Pinecreek-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-12	20-30	---	6.1-7.3	0	0	0	0
	12-19	10-25	---	6.1-7.3	0	0	0	0
	19-24	10-25	---	6.1-7.3	0	0	0	0
	24-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-70	1.0-5.0	---	5.1-6.5	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
907: Honeyjones-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
908: Honeyjones-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-7	15-25	---	6.1-7.3	0	0	0	0
	7-19	10-20	---	6.1-7.3	0	0	0	0
	19-24	1.0-7.0	---	5.6-7.3	0	0	0	0
	24-35	1.0-7.0	---	5.6-7.3	0	0	0	0
	35-47	1.0-5.0	---	5.6-7.3	0	0	0	0
	47-60	1.0-5.0	---	5.6-7.3	0	0	0	0
Ahrs-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-6	20-30	---	6.1-7.3	0	0	0	0
	6-14	15-25	---	6.1-7.3	0	0	0	0
	14-23	10-20	---	6.1-7.3	0	0	0	0
	23-30	1.0-5.0	---	5.6-6.5	0	0	0	0
	30-41	1.0-5.0	---	5.1-6.5	0	0	0	0
	41-51	1.0-5.0	---	5.1-6.5	0	0	0	0
	51-60	1.0-5.0	---	5.1-6.5	0	0	0	0
913: Hobo-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-2	---	20-30	4.5-5.5	0	0	0	0
	2-3	20-30	---	6.1-7.3	0	0	0	0
	3-8	10-20	---	6.1-7.3	0	0	0	0
	8-18	10-15	---	6.1-7.3	0	0	0	0
	18-22	10-15	---	5.6-6.5	0	0	0	0
	22-30	10-15	---	5.6-6.5	0	0	0	0
	30-44	10-16	---	5.6-6.5	0	0	0	0
	44-60	5.0-10	---	5.1-6.5	0	0	0	0
Acl: Arson-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-6	8.8-16	---	5.7-6.4	0	0	0	0
	6-10	8.4-18	---	5.6-6.0	0	0	0	0
	10-22	12-18	---	5.6-5.8	0	0	0	0
	22-33	12-19	---	5.7-5.9	0	0	0	0
	33-48	6.2-13	---	5.4-6.2	0	0	0	0
	48-60	---	---	---	---	---	---	---
Carlinton-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-8	9.4-18	---	5.5-6.6	0	0	0	0
	8-19	---	8.3-14	5.1-6.4	0	0	0	0
	19-31	---	9.6-16	5.1-6.2	0	0	0	0
	31-39	---	10-13	5.1-6.2	0	0	0	0
	39-60	---	12-17	5.1-6.6	0	0	0	0

Soil Survey of Benewah County Area, Idaho, Western Part

Table 30.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
Ac2:								
Arson, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-6	8.8-16	---	5.7-6.4	0	0	0	0
	6-10	8.4-18	---	5.6-6.0	0	0	0	0
	10-22	12-18	---	5.6-5.8	0	0	0	0
	22-33	12-19	---	5.7-5.9	0	0	0	0
	33-48	6.2-13	---	5.4-6.2	0	0	0	0
	48-60	---	---	---	---	---	---	---
Carlinton, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-8	9.4-18	---	5.5-6.6	0	0	0	0
	8-19	---	8.3-14	5.1-6.4	0	0	0	0
	19-31	---	9.6-16	5.1-6.2	0	0	0	0
	31-39	---	10-13	5.1-6.2	0	0	0	0
	39-60	---	12-17	5.1-6.6	0	0	0	0
An4:								
Arson, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-6	8.8-16	---	5.7-6.4	0	0	0	0
	6-10	8.4-18	---	5.6-6.0	0	0	0	0
	10-22	12-18	---	5.6-5.8	0	0	0	0
	22-33	12-19	---	5.7-5.9	0	0	0	0
	33-48	6.2-13	---	5.4-6.2	0	0	0	0
	48-60	---	---	---	---	---	---	---
Minaloosa, dry-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-5	7.3-17	---	5.6-6.8	0	0	0	0
	5-10	6.9-17	---	5.2-6.4	0	0	0	0
	10-32	7.9-17	---	5.2-6.4	0	0	0	0
	32-41	3.2-14	---	5.0-6.2	0	0	0	0
	41-60	2.8-11	---	5.0-6.2	0	0	0	0
Rs2:								
Reggear, moist-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-4	4.4-8.9	---	5.2-6.6	0	0	0	0
	4-8	4.4-8.8	---	5.2-6.6	0	0	0	0
	8-18	7.5-11	---	5.3-6.0	0	0	0	0
	18-31	8.5-15	---	5.3-6.3	0	0	0	0
	31-60	9.9-20	---	5.3-6.0	0	0	0	0
Stewah-----	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-5	7.5-11	---	6.1-6.6	0	0	0	0
	5-10	7.2-11	---	5.6-6.3	0	0	0	0
	10-16	9.9-17	---	5.2-6.2	0	0	0	0
	16-25	8.4-15	---	5.3-6.1	0	0	0	0
	25-59	6.5-10	---	5.0-5.9	0	0	0	0
	59-69	---	---	---	---	---	---	---

Table 31.--Water Features

(Depths of layers are in inches. See text for definitions of terms used in this table. Estimates of the frequency of flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the concern or that data were not estimated.)

Map symbol and soil name	Hydro- logic group	Month	Water table			Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Du
105: Aquic Udifluvents, protected-----	C		In	In	In			
		January	30-50	>72	---	---	None	Brie 7 d
		February	20-40	>72	---	---	None	Brie 7 d
		March	20-40	>72	---	---	None	Brie 7 d
		April	20-40	>72	---	---	None	Brie 7 d
		May	20-40	>72	---	---	None	Brie 7 d
		June	30-50	>72	---	---	None	Brie 7 d
		July	40-60	>72	---	---	None	Brie 7 d
		December	40-60	>72	---	---	None	Brie 7 d
Typic Fluvaquents, protected-----	A/D	January	12-36	>72	---	---	None	Brie 7 d
		February	4-18	>72	---	---	None	Brie 7 d
		March	4-18	>72	---	---	None	Brie 7 d
		April	4-18	>72	---	---	None	Brie 7 d
		May	4-18	>72	---	---	None	Brie 7 d
		June	4-18	>72	---	---	None	Brie 7 d
		July	18-36	>72	---	---	None	Brie 7 d
		August	24-50	>72	---	---	None	Brie 7 d
		September	36-60	>72	---	---	None	Brie 7 d
		October	40-60	>72	---	---	None	Brie 7 d
		November	30-50	>72	---	---	None	Brie 7 d
		December	18-44	>72	---	---	None	Brie 7 d
116: Thatuna-----	C							
		February	24-36	30-40	---	---	None	
		March	24-36	30-40	---	---	None	
		April	24-36	30-40	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
116: Caldwell	B/D		In	In	In		
		January	21-30	>72	---	---	None
		February	16-21	>72	---	---	None
		March	16-21	>72	---	---	None
		April	16-21	>72	---	---	None
		May	21-30	>72	---	---	None
		June	40-52	>72	---	---	None
		July	52-72	>72	---	---	None
		November	52-72	>72	---	---	None
		December	40-52	>72	---	---	None
		February	24-36	30-40	---	---	None
118: Thatuna	C	March	24-36	30-40	---	---	None
		April	24-36	30-40	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
118: Cald-----	C/D		In	In	In		
		January	13-19	>72	---	---	None
		February	11-13	>72	---	---	None
		March	11-13	>72	---	---	None
		April	11-13	>72	---	---	None
		May	14-19	>72	---	---	None
		June	29-40	>72	---	---	None
		July	40-52	>72	---	---	None
		November	40-52	>72	---	---	None
		December	29-40	>72	---	---	None
120: Latahco-----	C/D						
		January	21-30	25-38	---	---	None
		February	18-21	25-38	---	---	None
		March	16-21	25-38	---	---	None
		April	16-21	25-38	---	---	None
		May	21-30	25-38	---	---	None
		June	40-52	52-79	---	---	None
		December	40-52	52-79	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
121: Latahco-----	C/D		In	In	In		
		January	21-30	25-38	---	---	None
		February	18-21	25-38	---	---	None
		March	16-21	25-38	---	---	None
		April	16-21	25-38	---	---	None
		May	21-30	25-38	---	---	None
		June	40-52	52-79	---	---	None
		December	40-52	52-79	---	---	None
		January	8-26	18-45	---	---	None
		February	8-26	18-45	---	---	None
		March	8-26	18-45	---	---	None
		April	8-26	18-45	---	---	None
122: Tilma-----	C/D	January	8-26	18-45	---	---	None
		February	8-26	18-45	---	---	None
		March	8-26	18-45	---	---	None
		April	8-26	18-45	---	---	None
		May	8-26	18-45	---	---	None
		June	8-26	18-45	---	---	None
		July	8-26	18-45	---	---	None
		December	8-26	18-45	---	---	None
		January	18-27	20-30	---	---	None
		February	18-25	20-30	---	---	None
		March	18-25	20-30	---	---	None
		April	18-30	20-30	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
122: Latah-----D	D		In	In	In		
		January	18-22 31-38	20-28 >72	---	---	None
		February	18-22	>72	---	---	None
		March	18-22	>72	---	---	None
		April	18-22	>72	---	---	None
		May	31-38	>72	---	---	None
		June	38-60	>72	---	---	None
		September	50-60	>72	---	---	None
		October	50-60	>72	---	---	None
		November	45-50	>72	---	---	None
		December	18-22	20-28	---	---	None
			38-50	>72			

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
124: Caldwell-----	C/D		In	In	In		
		January	21-30	>72	---	---	None
		February	16-21	>72	---	---	None
		March	16-21	>72	---	---	None
		April	16-21	>72	---	---	None
		May	21-30	>72	---	---	None
		June	40-52	>72	---	---	None
		July	52-72	>72	---	---	None
		November	52-72	>72	---	---	None
		December	40-52	>72	---	---	None
Cald-----	C/D	January	13-19	>72	---	---	None
		February	11-13	>72	---	---	None
		March	11-13	>72	---	---	None
		April	11-13	>72	---	---	None
		May	14-19	>72	---	---	None
		June	29-40	>72	---	---	None
		July	40-52	>72	---	---	None
		November	40-52	>72	---	---	None
		December	29-40	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
125: Lovell-----	C/D		In	In	In		
		January	8-26 28-49	18-45 >72	---	---	None
		February	8-26 28-49	18-45 >72	---	---	None
		March	8-26 28-49	18-45 >72	---	---	None
		April	8-26 28-49	18-45 >72	---	---	None
		May	8-26 28-49	18-45 >72	---	---	None
		June	8-26 28-49	18-45 >72	---	---	None
		July	28-49	>72	---	---	None
		December	28-49	>72	---	---	None
Porrett-----	C/D	January	0-8	6-12	---	---	None
		February	0-4	6-12	---	---	None
		March	0-4	6-12	---	---	None
		April	0-4	6-12	---	---	None
		May	0-4	6-12	---	---	None
		June	0-12	8-19	---	---	None
		July	6-22	15-30	---	---	None
		November	8-26	18-30	---	---	None
		December	0-12	8-19	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
125: Aquandic Endoaquepts	B/D		In	In	In		
		January	15-40	>72	---	---	None
		February	5-20	>72	---	---	None
		March	5-20	>72	---	---	None
		April	5-20	>72	---	---	None
		May	10-25	>72	---	---	None
		June	20-40	>72	---	---	None
		July	30-50	>72	---	---	None
		August	40-60	>72	---	---	None
130: Porrett	C/D	January	0-8	6-12	---	---	None
		February	0-4	6-12	---	---	None
		March	0-4	6-12	---	---	None
		April	0-4	6-12	---	---	None
		May	0-4	6-12	---	---	None
		June	0-12	8-19	---	---	None
		July	6-22	15-30	---	---	None
		November	8-26	18-30	---	---	None
		December	0-12	8-19	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
136: Lovell-----	C/D		In	In	In		
		January	8-26 28-49	18-45 >72	---	---	None
		February	8-26 28-49	18-45 >72	---	---	None
		March	8-26 28-49	18-45 >72	---	---	None
		April	8-26 28-49	18-45 >72	---	---	None
		May	8-26 28-49	18-45 >72	---	---	None
		June	8-26 28-49	18-45 >72	---	---	None
		July	28-49	>72	---	---	None
		December	28-49	>72	---	---	None
Porrett-----	C/D	January	0-8	6-12	---	---	None
		February	0-4	6-12	---	---	None
		March	0-4	6-12	---	---	None
		April	0-4	6-12	---	---	None
		May	0-4	6-12	---	---	None
		June	0-12	8-19	---	---	None
		July	6-22	15-30	---	---	None
		November	8-26	18-30	---	---	None
		December	0-12	8-19	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
141: Miesen-----	C		In	In	In		
		January	24-40	>72	---	---	None
		February	24-40	>72	---	---	None
		March	24-40	>72	---	---	None
		April	24-40	>72	---	---	None
		May	24-40	>72	---	---	None
		June	24-50	>72	---	---	None
		July	40-60	>72	---	---	None
		August	40-60	>72	---	---	None
		September	40-60	>72	---	---	None
		October	40-60	>72	---	---	None
		November	24-40	>72	---	---	None
		December	24-40	>72	---	---	None
142: Miesen-----	C						
		January	24-40	>72	---	---	None
		February	24-40	>72	---	---	None
		March	24-40	>72	---	---	None
		April	24-40	>72	---	---	None
		May	24-40	>72	---	---	None
		June	24-50	>72	---	---	None
		July	40-60	>72	---	---	None
		August	40-60	>72	---	---	None
		September	40-60	>72	---	---	None
		October	40-60	>72	---	---	None
		November	24-40	>72	---	---	None
		December	24-40	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
142: Ramsdell-----	B/D		In	In	In		
		January	12-40	>72	---	---	None
		February	0-24	>72	---	---	None
		March	0-24	>72	---	---	None
		April	0-12	>72	---	---	None
		May	0-12	>72	---	---	None
		June	0-24	>72	---	---	None
		July	12-50	>72	---	---	None
		August	24-55	>72	---	---	None
		September	30-55	>72	---	---	None
		October	30-55	>72	---	---	None
		November	24-50	>72	---	---	None
		December	12-40	>72	---	---	None
143: Miesen, protected, drained-----	C						
		January	24-40	>72	---	---	None
		February	24-40	>72	---	---	None
		March	24-40	>72	---	---	None
		April	24-40	>72	---	---	None
		May	24-40	>72	---	---	None
		June	30-60	>72	---	---	None
		November	24-40	>72	---	---	None
		December	24-40	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
144: Miesen, protected, drained-----	C		In	In	In		
		January	24-40	>72	---	---	None
		February	24-40	>72	---	---	None
		March	24-40	>72	---	---	None
		April	24-40	>72	---	---	None
		May	24-40	>72	---	---	None
		June	30-60	>72	---	---	None
		November	24-40	>72	---	---	None
		December	24-40	>72	---	---	None
		January	24-44	>72	---	---	None
		February	4-24	>72	---	---	None
		March	4-24	>72	---	---	None
Ramsdell, protected, drained-----	B/D	April	4-20	>72	---	---	None
		May	4-20	>72	---	---	None
		June	6-36	>72	---	---	None
		July	36-60	>72	---	---	None
		August	40-60	>72	---	---	None
		September	40-60	>72	---	---	None
		October	40-60	>72	---	---	None
		November	36-60	>72	---	---	None
		December	24-54	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
145: Bellslake, protected, drained-----	B/D		In	In	In		
		January	0-12	>72	---	---	None
		February	0-12	>72	---	---	None
		March	0-12	>72	---	---	None
		April	0-12	>72	---	---	None
		May	0-12	>72	---	---	None
		June	6-36	>72	---	---	None
		July	36-60	>72	---	---	None
		August	36-60	>72	---	---	None
		September	36-60	>72	---	---	None
		October	36-60	>72	---	---	None
		November	12-48	>72	---	---	None
150: Pywell, protected, drained-----	B/D	December	6-24	>72	---	---	None
		January	0-12	>72	---	---	None
		February	0-12	>72	---	---	None
		March	0-12	>72	---	---	None
		April	0-12	>72	---	---	None
		May	0-12	>72	---	---	None
		June	6-24	>72	---	---	None
		July	12-42	>72	---	---	None
		August	24-48	>72	---	---	None
		September	24-48	>72	---	---	None
		October	24-48	>72	---	---	None
		November	12-42	>72	---	---	None
		December	6-24	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
155: Ramsdell-----	B/D		In	In	In		
		January	12-40	>72	---	---	None
		February	0-24	>72	---	---	None
		March	0-24	>72	---	---	None
		April	0-12	>72	---	---	None
		May	0-12	>72	---	---	None
		June	0-24	>72	---	---	None
		July	12-50	>72	---	---	None
		August	24-55	>72	---	---	None
		September	30-55	>72	---	---	None
		October	30-55	>72	---	---	None
		November	24-50	>72	---	---	None
		December	12-40	>72	---	---	None
156: Ramsdell, protected, drained-----	B/D						
		January	24-44	>72	---	---	None
		February	4-24	>72	---	---	None
		March	4-24	>72	---	---	None
		April	4-20	>72	---	---	None
		May	4-20	>72	---	---	None
		June	6-36	>72	---	---	None
		July	36-60	>72	---	---	None
		August	40-60	>72	---	---	None
		September	40-60	>72	---	---	None
		October	40-60	>72	---	---	None
		November	36-60	>72	---	---	None
		December	24-54	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
157: Ramsdell, protected, drained-----	B/D		In	In	In		
		January	24-44	>72	---	---	None
		February	4-24	>72	---	---	None
		March	4-24	>72	---	---	None
		April	4-20	>72	---	---	None
		May	4-20	>72	---	---	None
		June	6-36	>72	---	---	None
		July	36-60	>72	---	---	None
		August	40-60	>72	---	---	None
		September	40-60	>72	---	---	None
		October	40-60	>72	---	---	None
		November	36-60	>72	---	---	None
DeVoignes, protected, drained-----	C/D	December	24-54	>72	---	---	None
		January	0-12	>72	---	---	None
		February	0-12	>72	---	---	None
		March	0-12	>72	---	---	None
		April	0-12	>72	---	---	None
		May	0-12	>72	---	---	None
		June	6-36	>72	---	---	None
		July	36-48	>72	---	---	None
		August	36-60	>72	---	---	None
		September	36-54	>72	---	---	None
		October	24-54	>72	---	---	None
		November	12-48	>72	---	---	None
		December	6-24	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
158: DeVoignes-----	C/D		In	In	In		
		January	0-10	>72	0-12	Long (7 to 30 days)	Frequent
		February	0-10	>72	0-12	Long (7 to 30 days)	Frequent
		March	0-10	>72	0-12	Long (7 to 30 days)	Frequent
		April	0-10	>72	0-12	Long (7 to 30 days)	Frequent
		May	0-10	>72	0-12	Long (7 to 30 days)	Frequent
		June	5-20	>72	0-12	Long (7 to 30 days)	Frequent
		July	5-30	>72	---	---	---
		August	5-30	>72	---	---	---
		September	5-30	>72	---	---	---
		October	5-30	>72	---	---	---
		November	0-20	>72	---	---	---
		December	0-10	>72	0-12	Long (7 to 30 days)	Frequent

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
158: Pywell-----	B/D		In	In	In		
		January	0	>72	0-12	Very long (more than 30 days)	Frequent
		February	0	>72	0-12	Very long (more than 30 days)	Frequent
		March	0	>72	0-12	Very long (more than 30 days)	Frequent
		April	0	>72	0-18	Very long (more than 30 days)	Frequent
		May	0-5	>72	0-18	Very long (more than 30 days)	Frequent
		June	0-10	>72	0-18	Very long (more than 30 days)	Frequent
		July	0-20	>72	---	---	---
		August	0-25	>72	---	---	---
		September	0-25	>72	---	---	---
		October	0-25	>72	---	---	---
		November	0-20	>72	---	---	---
200: Blinn, stony surface-----	C	December	0	>72	0-12	Very long (more than 30 days)	Frequent
		Jan-Dec	---	---	---	---	None
201: Blinn, stony surface-----	C	Jan-Dec	---	---	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
202: Blinn, stony surface-----	C	Jan-Dec	In	In	In			
Bobbitt, stony surface-----	C	Jan-Dec	---	---	---	---	None	
210: Agatha, stony surface-----	C	Jan-Dec	---	---	---	---	None	
212: Agatha, stony surface-----	C	Jan-Dec	---	---	---	---	None	
230: Lacy, stony surface-----	D	Jan-Dec	---	---	---	---	None	
Rock outcrop-----	D	Jan-Dec	---	---	---	---	None	
231: Lacy, very stony surface-----	C	Jan-Dec	---	---	---	---	None	
Rock outcrop-----	D	Jan-Dec	---	---	---	---	None	
232: Lacy, stony surface-----	D	Jan-Dec	---	---	---	---	None	
Bobbitt, stony surface-----	C	Jan-Dec	---	---	---	---	None	
233: Lacy, very stony surface-----	C	Jan-Dec	---	---	---	---	None	
Bobbitt, very stony surface-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
250: Dorb, warm, stony surface-----	B	Jan-Dec	In	In	In			
			---	---	---	---	None	
255: Shayhill, stony surface-----	B	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
256: Shayhill, stony surface-----	B	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
257: Shayhill, dry, stony surface-----	B	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
260: Sedow-----	C	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
261: Sly, dry-----	C	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
Shayhill, dry-----	B	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
262: Sedow-----	C	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
sly, dry-----	C	Jan-Dec	---	---	---	---	None	
			---	---	---	---	None	
300: Taney-----	C/D	February March April	16-22 20-24 24-30	27-40 27-40 27-40	---	---	None None None	
			---	---	---	---	None	
301: Taney-----	C/D	February March April	16-22 20-24 24-30	27-40 27-40 27-40	---	---	None None None	
			---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table			Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency		
303: Carlinton-----	D		In	In	In				
		February	14-20	26-40	---	---	None		
		March	16-24	26-40	---	---	None		
		April	24-30	26-40	---	---	None		
Benewah-----	C/D								
		February	15-20	25-40	---	---	None		
		March	15-24	25-40	---	---	None		
		April	20-30	25-40	---	---	None		
304: Benewah-----	C/D								
		February	15-20	25-40	---	---	None		
		March	15-24	25-40	---	---	None		
		April	20-30	25-40	---	---	None		
Santa-----	C/D								
		February	14-19	22-34	---	---	None		
		March	16-21	22-34	---	---	None		
		April	21-30	22-34	---	---	None		
310: Santa-----	C/D								
		February	14-19	22-34	---	---	None		
		March	16-21	22-34	---	---	None		
		April	21-30	22-34	---	---	None		
311: Santa-----	C/D								
		February	14-19	22-34	---	---	None		
		March	16-21	22-34	---	---	None		
		April	21-30	22-34	---	---	None		
314: Sharptop-----	C								
		February	14-19	22-34	---	---	None		
		March	16-21	22-34	---	---	None		
		April	21-30	22-34	---	---	None		
Santa-----	C/D								
		February	14-19	22-34	---	---	None		
		March	16-21	22-34	---	---	None		
		April	21-30	22-34	---	---	None		

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
315: Setters-----	C/D		In	In	In			
		February	15-20	25-40	---		None	
		March	17-25	25-40	---		None	
		April	20-30	25-40	---		None	
316: Setters-----	C/D							
		February	15-20	25-40	---		None	
		March	17-25	25-40	---		None	
		April	20-30	25-40	---		None	
Taney-----	C/D							
		February	16-22	27-40	---		None	
		March	20-24	27-40	---		None	
		April	24-30	27-40	---		None	
320: Reggear-----	C/D							
		January	24-28	26-40	---		None	
		February	24-28	26-40	---		None	
		March	18-22	26-40	---		None	
		April	18-22	26-40	---		None	
		May	18-22	26-40	---		None	
		June	24-28	26-40	---		None	
		December	24-28	26-40	---		None	
321: Reggear, moist-----	D							
		January	24-30	26-40	---		None	
		February	22-24	26-40	---		None	
		March	18-22	26-40	---		None	
		April	18-22	26-40	---		None	
		May	18-22	26-40	---		None	
		June	24-34	26-40	---		None	
		December	24-34	26-40	---		None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
322: Reggear, moist-----	D		In	In	In			
		January	24-30	26-40	---	---	None	
		February	22-24	26-40	---	---	None	
		March	18-22	26-40	---	---	None	
		April	18-22	26-40	---	---	None	
		May	18-22	26-40	---	---	None	
		June	24-34	26-40	---	---	None	
		December	24-34	26-40	---	---	None	
sly-----	C	Jan-Dec	---	---	---	---	None	
323: Bechtel-----	B	Jan-Dec	---	---	---	---	None	
Reggear-----	C/D	January	24-28	26-40	---	---	None	
		February	24-28	26-40	---	---	None	
		March	18-22	26-40	---	---	None	
		April	18-22	26-40	---	---	None	
		May	18-22	26-40	---	---	None	
		June	24-28	26-40	---	---	None	
		December	24-28	26-40	---	---	None	
325: Reggear-----	C/D	January	24-28	26-40	---	---	None	
		February	24-28	26-40	---	---	None	
		March	18-22	26-40	---	---	None	
		April	18-22	26-40	---	---	None	
		May	18-22	26-40	---	---	None	
		June	24-28	26-40	---	---	None	
		December	24-28	26-40	---	---	None	
Sharptop, basalt substratum-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
326: Reggear-----	C/D		In	In	In			
		January	24-28	26-40	---	---	None	
		February	24-28	26-40	---	---	None	
		March	18-22	26-40	---	---	None	
		April	18-22	26-40	---	---	None	
		May	18-22	26-40	---	---	None	
		June	24-28	26-40	---	---	None	
Seddow-----	C	December	24-28	26-40	---	---	None	
		Jan-Dec	---	---	---	---	None	
330: Carlinton-----	D	February	14-20	26-40	---	---	None	
		March	16-24	26-40	---	---	None	
		April	24-30	26-40	---	---	None	
Carlinton, dry-----	D	February	14-20	26-40	---	---	None	
		March	16-24	26-40	---	---	None	
		April	24-30	26-40	---	---	None	
335: Carlinton, dry-----	D	February	14-20	26-40	---	---	None	
		March	16-24	26-40	---	---	None	
		April	24-30	26-40	---	---	None	
336: Carlinton, dry-----	D	February	14-20	26-40	---	---	None	
		March	16-24	26-40	---	---	None	
		April	24-30	26-40	---	---	None	
Taney-----	C/D	February	14-20	26-40	---	---	None	
		March	16-24	26-40	---	---	None	
		April	24-30	26-40	---	---	None	
		February	16-22	27-40	---	---	None	
		March	20-24	27-40	---	---	None	
		April	24-30	27-40	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
340: Arson-----	B	Jan-Dec	In	In	In			
Lotuspoint-----	C	Jan-Dec	---	---	---	---	None	
341: Sinkler-----	C	Jan-Dec	---	---	---	---	None	
Arson-----	B	Jan-Dec	---	---	---	---	None	
342: sinkler, dry-----	C	Jan-Dec	---	---	---	---	None	
Arson, dry-----	B	Jan-Dec	---	---	---	---	None	
350: Southwick-----	C	January February March April	24-32 24-32 24-32 24-32	27-40 27-40 27-40 27-40	---	---	None None None None	
351: Southwick-----	C	January February March April	24-32 24-32 24-32 24-32	27-40 27-40 27-40 27-40	---	---	None None None None	
353: Tensed-----	C/D	February March April	22-24 22-24 22-24	24-34 24-34 24-34	---	---	None None None None	
Pedee-----	C/D	February March April	21-24 21-24 21-24	24-34 24-34 24-34	---	---	None None None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency		
354: Tensed-----	C/D		In	In	In				
		February	22-24	24-34	---	---	None		
		March	22-24	24-34	---	---	None		
		April	22-24	24-34	---	---	None		
Pedee-----	C/D								
		February	21-24	24-34	---	---	None		
		March	21-24	24-34	---	---	None		
		April	21-24	24-34	---	---	None		
355: Southwick-----	C								
		January	24-32	27-40	---	---	None		
		February	24-32	27-40	---	---	None		
		March	24-32	27-40	---	---	None		
Driscoll-----	C/D								
		January	21-28	26-34	---	---	None		
		February	21-28	26-34	---	---	None		
		March	21-28	26-34	---	---	None		
356: Southwick-----	C								
		January	24-32	27-40	---	---	None		
		February	24-32	27-40	---	---	None		
		March	24-32	27-40	---	---	None		
Driscoll-----	C/D								
		January	21-28	26-34	---	---	None		
		February	21-28	26-34	---	---	None		
		March	21-28	26-34	---	---	None		
360: Larkin-----	C								
		Jan-Dec	---	---	---	---	None		
361: Larkin-----	C								
		Jan-Dec	---	---	---	---	None		

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
363: Larkin----- Driscoll-----	C	Jan-Dec	In	In	In			
			---	---	---	---	None	
	C/D	January February March April	21-28 21-28 21-28 21-28	26-34 26-34 26-34 26-34	---	---	None None None None	
364: Larkin----- Southwick-----	C	Jan-Dec	---	---	---	---	None	
	C	January February March April	24-32 24-32 24-32 24-32	27-40 27-40 27-40 27-40	---	---	None None None None	
367: Larkin----- Driscoll-----	C	Jan-Dec	---	---	---	---	None	
	C/D	January February March April	21-28 21-28 21-28 21-28	26-34 26-34 26-34 26-34	---	---	None None None None	
400: Driscoll----- Thatuna-----	C/D	January February March April	21-28 21-28 21-28 21-28	26-34 26-34 26-34 26-34	---	---	None None None None	
	C	February March April	24-36 24-36 24-36	30-40 30-40 30-40	---	---	None None None	
Naiff-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
406: Thatuna-----	C		In	In	In		
		February	24-36	30-40	---	---	None
		March	24-36	30-40	---	---	None
		April	24-36	30-40	---	---	None
Naff-----	C	Jan-Dec	---	---	---	---	None
410: Palouse-----	C	Jan-Dec	---	---	---	---	None
Naff-----	C	Jan-Dec	---	---	---	---	None
411: Palouse-----	C	Jan-Dec	---	---	---	---	None
414: Naff-----	C	Jan-Dec	---	---	---	---	None
Thatuna-----	C	February	24-36	30-40	---	---	None
		March	24-36	30-40	---	---	None
		April	24-36	30-40	---	---	None
415: Naff-----	C	Jan-Dec	---	---	---	---	None
Tilma-----	C/D	January	18-27	20-30	---	---	None
		February	18-25	20-30	---	---	None
		March	18-25	20-30	---	---	None
		April	18-30	20-30	---	---	None
		December	18-30	20-30	---	---	None
416: Naff-----	C	Jan-Dec	---	---	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
416: Thatuna-----	C	February March April	In 24-36 24-36 24-36	In 30-40 30-40 30-40	In --- --- ---		
417: Naiff-----	C	Jan-Dec	---	---	---		None
Palouse-----	C	Jan-Dec	---	---	---		None
420: Garfield-----	C	Jan-Dec	---	---	---		None
Tilma-----	C/D	January February March April December	18-27 18-25 18-25 18-30 18-30	20-30 20-30 20-30 20-30 20-30	--- --- --- --- ---		None None None None None
421: Naiff-----	C	Jan-Dec	---	---	---		None
Garfield-----	C	Jan-Dec	---	---	---		None
500: Hobo-----	C/D	February March April	14-22 14-22 14-22	18-24 18-24 18-24	--- --- ---		None None None
Threebear-----	C/D	January February March April May December	24-34 12-20 12-20 12-20 20-24 24-34	26-40 26-40 26-40 26-40 26-40 26-40	--- --- --- --- --- ---		None None None None None None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table			Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency		
501: Hobo, warm-----	C/D		In	In	In				
		February	14-22	18-24	---	---	None		
		March	14-22	18-24	---	---	None		
		April	14-22	18-24	---	---	None		
Threebear, warm-----	C/D	January	22-24	23-40	---	---	None		
		February	18-22	23-40	---	---	None		
		March	12-18	23-40	---	---	None		
		April	12-18	23-40	---	---	None		
		May	22-29	23-40	---	---	None		
510: Honeyjones-----	B	Jan-Dec	---	---	---	---	None		
Ahrs-----	B	Jan-Dec	---	---	---	---	None		
600: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None		
Huckle-----	B	Jan-Dec	---	---	---	---	None		
601: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None		
McCrosket-----	B	Jan-Dec	---	---	---	---	None		
605: Benewah-----	C/D	February	15-20	25-40	---	---	None		
		March	15-24	25-40	---	---	None		
		April	20-30	25-40	---	---	None		
		Jan-Dec	---	---	---	---	None		
Rasser-----	C	Jan-Dec	---	---	---	---	None		

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
606: Benewah-----	C/D		In	In	In			
		February	15-20	25-40	---	---	None	
		March	15-24	25-40	---	---	None	
		April	20-30	25-40	---	---	None	
Rasser-----	C	Jan-Dec	---	---	---	---	None	
610: Schumacher-----	B	Jan-Dec	---	---	---	---	None	
611: Schumacher-----	C	Jan-Dec	---	---	---	---	None	
Tekoa-----	C	Jan-Dec	---	---	---	---	None	
612: Libertybutte-----	D	Jan-Dec	---	---	---	---	None	
Tekoa-----	C	Jan-Dec	---	---	---	---	None	
613: Ardenvoir, dry-----	B	Jan-Dec	---	---	---	---	None	
Lotuspoint-----	C	Jan-Dec	---	---	---	---	None	
614: Ardenvoir, dry-----	B	Jan-Dec	---	---	---	---	None	
Lotuspoint-----	C	Jan-Dec	---	---	---	---	None	
617: Tekoa-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
621: Huckle-----	B	Jan-Dec	In	In	In			
			---	---	---	---	None	
625: Huckle-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
650: Grangemont-----	C	Jan-Dec	---	---	---	---	None	
651: Kingspeak-----	C	Jan-Dec	---	---	---	---	None	
Shayhill, stony surface-----	B	Jan-Dec	---	---	---	---	None	
652: Kingspeak-----	C	Jan-Dec	---	---	---	---	None	
653: Kingspeak, cool-----	C	Jan-Dec	---	---	---	---	None	
655: Tigley, moist-----	C	Jan-Dec	---	---	---	---	None	
656: Kingspeak, dry-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
660: Threebear-----	C/D		In	In	In			
		January	24-34	26-40	---	---	None	
		February	12-20	26-40	---	---	None	
		March	12-20	26-40	---	---	None	
		April	12-20	26-40	---	---	None	
		May	20-24	26-40	---	---	None	
		December	24-34	26-40	---	---	None	
662: Threebear, warm-----	C/D							
		January	22-24	23-40	---	---	None	
		February	18-22	23-40	---	---	None	
		March	12-18	23-40	---	---	None	
		April	12-18	23-40	---	---	None	
		May	22-29	23-40	---	---	None	
663: Threebear, warm-----	C/D							
		January	22-24	23-40	---	---	None	
		February	18-22	23-40	---	---	None	
		March	12-18	23-40	---	---	None	
		April	12-18	23-40	---	---	None	
		May	22-29	23-40	---	---	None	
Porrett-----	C/D							
		January	0-8	6-12	---	---	None	Lon 30
		February	0-4	6-12	---	---	None	Lon 30
		March	0-4	6-12	---	---	None	Lon 30
		April	0-4	6-12	---	---	None	Lon 30
		May	0-4	6-12	---	---	None	Lon 30
		June	0-12	8-19	---	---	None	Lon 30
		July	6-22	15-30	---	---	None	
		November	8-26	18-30	---	---	None	
		December	0-12	8-19	---	---	None	Lon 30

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
665: Grangemont, warm-----	C	Jan-Dec	In	In	In			
			---	---	---	---	None	
670: Honeyjones, warm-----	B	Jan-Dec	---	---	---	---	None	
671: Honeyjones-----	B	Jan-Dec	---	---	---	---	None	
680: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
Huckle-----	B	Jan-Dec	---	---	---	---	None	
681: Huckle-----	B	Jan-Dec	---	---	---	---	None	
Ahrs-----	B	Jan-Dec	---	---	---	---	None	
700: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
Huckle-----	B	Jan-Dec	---	---	---	---	None	
701: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
McCrosket-----	B	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
703: Ardenvoir, dry-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
704: Ardenvoir, dry-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
705: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
Rasser-----	C	Jan-Dec	---	---	---	---	None	
706: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
707: Huckle, dry-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
710: McCrosket-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
711: McCrosket-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
712: McCrosket-----	B	Jan-Dec	In	In	In			
			---	---	---	---	None	
Tekoa-----	C	Jan-Dec	---	---	---	---	None	
716: Ahrs-----	B	Jan-Dec	---	---	---	---	None	
720: Huckle-----	B	Jan-Dec	---	---	---	---	None	
721: Huckle-----	B	Jan-Dec	---	---	---	---	None	
Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
735: Lotuspoint, stony surface-----	C	Jan-Dec	---	---	---	---	None	
736: Lotuspoint, stony surface-----	C	Jan-Dec	---	---	---	---	None	
Rock outcrop-----	D	Jan-Dec	---	---	---	---	None	
756: Tigley-----	C	Jan-Dec	---	---	---	---	None	
757: Hugus, warm-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
758: Tigley, moist-----			In	In	In		
	C	Jan-Dec	---	---	---	---	None
Hugus-----	C	Jan-Dec	---	---	---	---	None
765: Saint Maries-----	B	Jan-Dec	---	---	---	---	None
Huckle-----	B	Jan-Dec	---	---	---	---	None
770: Pinecreek-----	B	Jan-Dec	---	---	---	---	None
771: Honeyjones, warm-----	B	Jan-Dec	---	---	---	---	None
772: Honeyjones, warm-----	B	Jan-Dec	---	---	---	---	None
Ahrs-----	B	Jan-Dec	---	---	---	---	None
773: Honeyjones, dry-----	B	Jan-Dec	---	---	---	---	None
774: Pinecreek, moist-----	B	Jan-Dec	---	---	---	---	None
775: Pinecreek, moist-----	B	Jan-Dec	---	---	---	---	None
776: Cassychill-----	D	Jan-Dec	---	---	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Du
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	
777: Bouldercreek, warm-----	B	Jan-Dec	In	In	In			
			---	---	---	---	None	
778: Cassyhill-----	D	Jan-Dec	---	---	---	---	None	
Lotuspoint-----	C	Jan-Dec	---	---	---	---	None	
779: Bouldercreek-----	B	Jan-Dec	---	---	---	---	None	
780: Ardenvoir-----	B	Jan-Dec	---	---	---	---	None	
Huckle-----	B	Jan-Dec	---	---	---	---	None	
Saint Maries, dry-----	B	Jan-Dec	---	---	---	---	None	
781: Ahrs, moist-----	B	Jan-Dec	---	---	---	---	None	
Honeyjones, warm-----	B	Jan-Dec	---	---	---	---	None	
782: Ardenvoir, dry-----	B	Jan-Dec	---	---	---	---	None	
Cassyhill-----	D	Jan-Dec	---	---	---	---	None	
784: Pinecreek, moist-----	B	Jan-Dec	---	---	---	---	None	
Lotuspoint-----	C	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
791: Latour-----	B	Jan-Dec	In	In	In		
			---	---	---	---	None
800: Rock outcrop-----	D	Jan-Dec	---	---	---	---	None
801: Pits, gravel-----	A	Jan-Dec	---	---	---	---	None
802: Kingspeak-----	C	Jan-Dec	---	---	---	---	None
Urban land-----	D	Jan-Dec	---	---	---	---	None
900: Water-----	---	---	---	---	---	---	---
901: Aquandic Endoquepts-----	B/D	January February	15-40 5-20	>72 >72	---	---	None None
		March	5-20	>72	---	---	None
		April	5-20	>72	---	---	None
		May	10-25	>72	---	---	None
		June	20-40	>72	---	---	None
		July	30-50	>72	---	---	None
		August	40-60	>72	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency
901: Aquic Udifluvents	C		In	In	In		
		January	25-50	>72	---	---	None
		February	20-35	>72	---	---	None
		March	20-35	>72	---	---	None
		April	20-35	>72	---	---	None
		May	20-35	>72	---	---	None
		June	25-50	>72	---	---	None
		July	40-60	>72	---	---	None
902: Ahrs	B	August	50-60	>72	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
907: Honeyjones	B	February	14-22	18-24	---	---	None
		March	14-22	18-24	---	---	None
		April	14-22	18-24	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
908: Honeyjones	B	February	14-22	18-24	---	---	None
		March	14-22	18-24	---	---	None
		April	14-22	18-24	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
913: Hobo	C/D	February	14-22	18-24	---	---	None
		March	14-22	18-24	---	---	None
		April	14-22	18-24	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None
		Jan-Dec	---	---	---	---	None

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table			Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Du
Ac1: Arson----- Carlinton-----	B	Jan-Dec	In	In	In			
			---	---	---	---	None	
	C/D	January	8-40	31-40	---	---	None	
		February	8-40	31-40	---	---	None	
		March	8-26	31-40	---	---	None	
		April	8-26	31-40	---	---	None	
		May	8-40	31-40	---	---	None	
		June	33-40	31-40	---	---	None	
		November	16-40	31-40	---	---	None	
		December	8-40	31-40	---	---	None	
Ac2: Arson, dry----- Carlinton, dry-----	B	Jan-Dec	---	---	---	---	None	
	C/D	January	8-40	31-40	---	---	None	
		February	8-40	31-40	---	---	None	
		March	8-20	31-40	---	---	None	
		April	8-20	31-40	---	---	None	
		May	8-40	31-40	---	---	None	
		June	33-40	31-40	---	---	None	
		November	16-40	31-40	---	---	None	
		December	8-40	31-40	---	---	None	
An4: Arson, dry----- Minaloosa, dry-----	B	Jan-Dec	---	---	---	---	None	
	B	Jan-Dec	---	---	---	---	None	

Table 31.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table			Ponding		
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Du
Rs2: Reggear, moist-----	C/D		In	In	In			
		January	20-39	24-39	---	---	None	None
		February	20-30	24-39	---	---	None	None
		March	20-31	24-39	---	---	None	None
		April	18-30	24-39	---	---	None	None
		May	18-39	24-39	---	---	None	None
		June	22-39	24-39	---	---	None	None
		July	22-39	24-39	---	---	None	None
		November	26-39	24-39	---	---	None	None
		December	20-39	24-39	---	---	None	None
			---	---	---	---	None	None
		Jan-Dec						
Stewah-----	B							

Table 32.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a were not estimated.)

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
105: Aquic Udifluvents, protected-----	Strongly contrasting textural stratification	In 22-30	In ---	Noncemented	In 0	In ---	
Typic Fluvaquents, protected-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	---	High
116: Thatuna-----	---	---	---	---	0	---	High
Caldwell-----	---	---	---	---	0	---	High
118: Thatuna-----	---	---	---	---	0	---	High
Cald-----	---	---	---	---	0	---	High
120: Latahco-----	---	---	---	---	0	---	High
121: Latahco-----	---	---	---	---	0	---	High
Lovell-----	---	---	---	---	0	---	High
122: Tiima-----	Abrupt textural change	21-31	---	Noncemented	0	---	Moderate
Latah-----	---	---	---	---	0	---	High
124: Caldwell-----	---	---	---	---	0	---	High
Cald-----	---	---	---	---	0	---	High

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
125: Lovell-----	---	In ---	In	---	In	In		
Porrett-----	---	---	---	---	0	---	High	Hig
Aquandic Endoaquepts---	Strongly contrasting textural stratification	30-48	---	Noncemented	0	---	Moderate	Hig
130: Porrett-----	---	---	---	---	0	---	High	Hig
136: Lovell-----	---	---	---	---	0	---	High	Hig
Porrett-----	---	---	---	---	0	---	High	Hig
141: Miesen-----	---	---	---	---	0	---	High	Hig
142: Miesen-----	---	---	---	---	0	---	High	Hig
Ramsdell-----	---	---	---	---				
143: Miesen, protected, drained-----	---	---	---	---	0	---	High	Hig
144: Miesen, protected, drained-----	---	---	---	---				
Ramsdell, protected, drained-----	---	---	---	---	0	---	High	Hig
145: Bellslake, protected, drained-----	---	---	---	---				
150: Pywell, protected, drained-----	---	---	---	---	1-6	6-12	High	Hig
155: Ramsdell-----	---	---	---	---	8-15	40-60	High	Hig
	---	---	---	---	0	---	High	Hig

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
156: Ramsdell, protected, drained-----	---	In	In		In	In		
157: Ramsdell, protected, drained-----	---	---	---	---	0	---	High	High
DeVoignes, protected, drained-----	---	---	---	---	0	---	High	High
158: DeVoignes-----	---	---	---	---	4-8	10-20	High	High
Pywell-----	---	---	---	---	4-8	10-20	High	Mod
200: Blinn, stony surface---	Lithic bedrock	20-40	---	Very strongly cemented	0	---	Moderate	Low
201: Blinn, stony surface---	Lithic bedrock	20-40	---	Very strongly cemented	0	---	Moderate	Low
202: Blinn, stony surface---	Lithic bedrock	20-40	---	Very strongly cemented	0	---	Moderate	Low
Bobbitt, stony surface	Lithic bedrock	20-40	---	Very strongly cemented	0	---	Moderate	Mod
210: Agatha, stony surface---	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Mod
212: Agatha, stony surface---	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Mod
230: Lacy, stony surface---	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
Rock outcrop-----	Lithic bedrock	0-0	---	Indurated	0	---	---	
231: Lacy, very stony surface-----	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
Rock outcrop-----	Lithic bedrock	0-0	---	Indurated	0	---	---	

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
232: Lacy, stony surface----	Lithic bedrock	In 10-20	In ---	Indurated	In 0	In ---		Low
Bobbitt, stony surface	Lithic bedrock	20-40	---	Very strongly cemented	0	---	Moderate	Mod
233: Lacy, very stony surface-----	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
Bobbitt, very stony surface-----	Lithic bedrock	20-40	---	Indurated	0	---	Moderate	Mod
250: Dorb, warm, stony surface-----	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Mod
255: Shayhill, stony surface	Strongly contrasting textural stratification	19-30	---	Noncemented	0	---	Moderate	Mod
256: Shayhill, stony surface	Strongly contrasting textural stratification	19-30	---	Noncemented	0	---	Moderate	Mod
257: Shayhill, dry, stony surface-----	Strongly contrasting textural stratification	19-30	---	---	0	---	Moderate	Mod
260: Sedlow-----	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Mod
261: Sly, dry-----	---	---	---	---	0	---	Moderate	Low
Shayhill, dry-----	Strongly contrasting textural stratification	19-30	---	Noncemented	0	---	Moderate	Mod

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
262: Sedow----- sly, dry-----	Lithic bedrock ---	In 40-60 ---	In --- ---	 Indurated ---	In 0 0	In --- ---	 Moderate Moderate	 Mod Low
300: Taney-----	Fragipan	23-40	---	Noncemented	0	---	High	High
301: Taney-----	Fragipan	23-40	---	Noncemented	0	---	High	High
303: Carlinton-----	Fragipan	21-40	---	Noncemented	0	---	High	High
Benewah-----	---	---	---	---	0	---	High	High
304: Benewah-----	---	---	---	---	0	---	High	High
Santa-----	Fragipan	23-40	---	Noncemented	0	---	High	High
310: Santa-----	Fragipan	23-40	---	Noncemented	0	---	High	High
311: Santa-----	Fragipan	23-40	---	Noncemented	0	---	High	High
314: Sharptop-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High	Low
Santa-----	Fragipan	23-40	---	Noncemented	0	---	High	High
315: Setters-----	Abrupt textural change	21-30	---	Noncemented	0	---	Moderate	High
316: Setters-----	Abrupt textural change	21-30	---	Noncemented	0	---	Moderate	High
Taney-----	Fragipan	23-40	---	Noncemented	0	---	High	High
320: Reggear-----	Fragipan	20-40	---	Noncemented	0	---	High	High

Table 32.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
321: Reggear, moist-----	Fragipan	In 20-40	In ---	Noncemented	In 0	In ---	Hig High
322: Reggear, moist-----	Fragipan	20-40	---	Noncemented	0	---	Hig High
Sly-----	---	---	---	---	0	---	Low Moderate
323: Bechtel-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Low Moderate
Reggear-----	Fragipan	20-40	---	Noncemented	0	---	Hig
325: Reggear-----	Fragipan	20-40	---	Noncemented	0	---	Hig High
Sharptop, basalt substratum-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Low High
326: Reggear-----	Fragipan	20-40	---	Noncemented	0	---	Hig High
Seddown-----	Lithic bedrock	40-60	---	Indurated	0	---	Mod Moderate
330: Carlinton-----	Fragipan	21-40	---	Noncemented	0	---	Hig High
Carlinton, dry-----	Fragipan	21-40	---	Noncemented	0	---	Hig High
335: Carlinton, dry-----	Fragipan	21-40	---	Noncemented	0	---	Hig High
336: Carlinton, dry-----	Fragipan	21-40	---	Noncemented	0	---	Hig High
Taney-----	Fragipan	23-40	---	Noncemented	0	---	Hig High
340: Arson-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod Moderate
Lotuspoint-----	Lithic bedrock	20-40	---	Indurated	0	---	Mod Moderate

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
341: Sinkler-----	---	In	In	---	In	In		
		---	---	---	0	---	High	Low
Arson-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod
342: Sinkler, dry-----	---	---	---	---	0	---	High	Low
Arson, dry-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod
350: Southwick-----	---	---	---	---	0	---	High	Hig
351: Southwick-----	---	---	---	---	0	---	High	Hig
353: Tensed-----	Strongly contrasting textural stratification	50-59	---	Noncemented	0	---	Moderate	Hig
Pedee-----	Strongly contrasting textural stratification	22-35	---	Noncemented	0	---	Moderate	Hig
354: Tensed-----	Strongly contrasting textural stratification	50-59	---	Noncemented	0	---	Moderate	Hig
Pedee-----	Strongly contrasting textural stratification	22-35	---	Noncemented	0	---	Moderate	Hig
355: Southwick-----	---	---	---	---	0	---	High	Hig
Driscoll-----	Abrupt textural change	25-35	---	Noncemented	0	---	Moderate	Hig

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
356: Southwick-----	---	In ---	In	---	In	In	
Driscoll-----	Abrupt textural change	25-35	---	Noncemented	0	---	High
360: Larkin-----	---	---	---	---	0	---	Moderate
361: Larkin-----	---	---	---	---	0	---	
363: Larkin-----	---	---	---	---	0	---	High
Driscoll-----	Abrupt textural change	25-35	---	Noncemented	0	---	Moderate
364: Larkin-----	---	---	---	---	0	---	High
Southwick-----	---	---	---	---	0	---	High
367: Larkin-----	---	---	---	---	0	---	High
Driscoll-----	Abrupt textural change	25-35	---	Noncemented	0	---	Moderate
400: Driscoll-----	Abrupt textural change	25-35	---	Noncemented	0	---	Moderate
405: Thatuna-----	---	---	---	---	0	---	High
Naff-----	---	---	---	---	0	---	High
406: Thatuna-----	---	---	---	---	0	---	High
Naff-----	---	---	---	---	0	---	High
410: Palouse-----	---	---	---	---	0	---	High
Naff-----	---	---	---	---	0	---	High

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
411: Palouse-----	---	In ---	In ---	---	In 0	In ---	Low High
414: Naff-----	---	---	---	---	0	---	Mod High
Thatuna-----	---	---	---	---	0	---	Hig High
415: Naff-----	---	---	---	---	0	---	Mod High
Tilma-----	Abrupt textural change	21-31	---	Noncemented	0	---	Hig Moderate
416: Naff-----	---	---	---	---	0	---	Mod High
Thatuna-----	---	---	---	---	0	---	Hig High
417: Naff-----	---	---	---	---	0	---	Mod High
Palouse-----	---	---	---	---	0	---	Low High
420: Garfield-----	---	---	---	---	0	---	Hig Moderate
Tilma-----	Abrupt textural change	21-31	---	Noncemented	0	---	Hig Moderate
421: Naff-----	---	---	---	---	0	---	Mod High
Garfield-----	---	---	---	---	0	---	Hig Moderate
500: Hobo-----	Strongly contrasting textural stratification	42-52	---	Noncemented	0	---	Hig High
Threbear-----	Fragipan	23-40	---	Noncemented	0	---	Hig High

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
501: Hobo, warm-----		In	In		In	In	
	Strongly contrasting textural stratification	42-52	---	Noncemented	0	---	High
Threebear, warm-----	Fragipan	23-40	---	Noncemented	0	---	High
510: Honeyjones-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High
Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	---	Moderate
600: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate
Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High
601: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate
McCrosket-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate
605: Benewah-----	---	---	---	---	0	---	High
Rasser-----	Strongly contrasting textural stratification	11-24	---	Noncemented	0	---	Moderate

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
606: Benewah-----	---	In	In		In	In		
	---	---	---	---	0	---	High	Hig
	Strongly contrasting textural stratification	11-24	---	Noncemented	0	---	Moderate	Low
610: Schumacher-----	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Low
	Lithic bedrock	40-60	---	Indurated	0	---	Moderate	Low
	Lithic bedrock	29-40	---	Indurated	0	---	Moderate	Mod
612: Libertybutte-----	Paralithic bedrock	14-19	---	Moderately cemented	0	---	Moderate	Low
	Lithic bedrock	14-20	---	Indurated				
	Lithic bedrock	29-40	---	Indurated	0	---	Moderate	Mod
613: Ardenvoir, dry-----	Lithic bedrock	29-40	---	Indurated				
	Strongly contrasting textural stratification	10-20	---	Noncemented	0	---	Moderate	Mod
	Paralithic bedrock	40-60	---	Moderately cemented				
614: Ardenvoir, dry-----	Lithic bedrock	20-40	---	Indurated	0	---	Moderate	Mod
	Strongly contrasting textural stratification	10-20	---	Noncemented	0	---	Moderate	Mod
	Paralithic bedrock	40-60	---	Moderately cemented				
617: Tekoa-----	Lithic bedrock	20-40	---	Indurated	0	---	Moderate	Mod
	Lithic bedrock	29-40	---	Indurated	0	---	Moderate	Mod

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
621: Huckle-----	Paralithic bedrock	In 40-60	In ---		In 0	In ---	Hig
625: Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Hig
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
650: Grangemont-----	---	---	---	---	0	---	Low
651: Kingspeak-----	---	---	---	---	0	---	Mod
shayhill, stony surface	Strongly contrasting textural stratification	19-30	---	Noncemented	0	---	Mod
652: Kingspeak-----	---	---	---	---	0	---	Mod
653: Kingspeak, cool-----	---	---	---	---	0	---	Mod
655: Tigley, moist-----	---	---	---	---	0	---	Low
656: Kingspeak, dry-----	---	---	---	---	0	---	Mod
660: Threebear-----	Fragipan	23-40	---	Noncemented	0	---	Hig
662: Threebear, warm-----	Fragipan	23-40	---	Noncemented	0	---	Hig
663: Threebear, warm-----	Fragipan	23-40	---	Noncemented	0	---	Hig
Porrett-----	---	---	---	---	0	---	Hig
665: Grangemont, warm-----	---	---	---	---	0	---	Low

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
670: Honeyjones, warm-----	Strongly contrasting textural stratification	In 19-35	In ---	Noncemented	In 0	In ---	High	Hig
671: Honeyjones-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High	Hig
680: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod
Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High	Hig
681: Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High	Hig
Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	---	Moderate	Mod
700: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod
Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High	Hig
701: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod
McCrosket-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Moderate	Mod

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
703: Ardenvoir, dry-----		In	In		In	In	
	Strongly contrasting textural stratification	10-20	---	Noncemented	0	---	Mod
	Paralithic bedrock	40-60	---	Moderately cemented			
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
704: Ardenvoir, dry-----	Strongly contrasting textural stratification	10-20	---	Noncemented	0	---	Mod
	Paralithic bedrock	40-60	---	Moderately cemented			
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
705: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
Rasser-----	Strongly contrasting textural stratification	40-60	---	Moderately cemented	0	---	Mod
		11-24	---	Noncemented	0	---	Low
706: Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
707: Huckle, dry-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
710: McCrosket-----	Paralithic bedrock	In 40-60	In ---		In 0	In ---	Mod
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
711: McCrosket-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
712: McCrosket-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
Tekoa-----	Lithic bedrock	29-40	---	Indurated	0	---	Mod
716: Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	---	Mod
720: Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Hig
721: Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Hig
Ardenvoir-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	Mod
735: Lotuspoint, stony surface-----	Lithic bedrock	20-40	---	Indurated	0	---	Mod
736: Lotuspoint, stony surface-----	Lithic bedrock	20-40	---	Indurated	0	---	Mod
Rock outcrop-----	Lithic bedrock	0-0	---	Indurated	0	---	---

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
756: Tigley-----	---	In ---	In	---	In 0	In ---	Low
757: Hugus, warm-----	Strongly contrasting textural stratification	30-40	---	Noncemented	0	---	High
758: Tigley, moist-----	---	---	---	---	0	---	Low
Hugus-----	Strongly contrasting textural stratification	20-40	---	Noncemented	0	---	High
765: Saint Maries-----	---	---	---	---	0	---	Moderate
Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High
770: Pinecreek-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	---	High
771: Honeyjones, warm-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High
772: Honeyjones, warm-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence			Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
772: Ahrs-----	Strongly contrasting textural stratification	In 23-41	In ---	Noncemented	In 0	In ---	Moderate	Mod
773: Honeyjones, dry-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High	Hig
774: Pinecreek, moist-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	---	High	Hig
775: Pinecreek, moist-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	---	High	Hig
776: Cassyhill-----	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
777: Bouldercreek, warm----	Strongly contrasting textural stratification	16-25	---	Noncemented	0	---	High	Hig
778: Cassyhill-----	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
Lotuspoint-----	Lithic bedrock	20-40	---	Indurated	0	---	Moderate	Mod
779: Bouldercreek-----	Strongly contrasting textural stratification	16-33	---	Noncemented	0	---	High	Hig

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total		
780: Ardenvoir-----	Paralithic bedrock	In 40-60	In ---		In 0	In ---		Mod
Huckle-----	Paralithic bedrock	40-60	---	Moderately cemented	0	---	High	Hig
Saint Maries, dry-----	---	---	---	---	0	---	Moderate	Mod
781: Ahrs, moist-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	---	Moderate	Mod
Honeyjones, warm-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	---	High	Hig
782: Ardenvoir, dry-----	Strongly contrasting textural stratification Paralithic bedrock	10-20 40-60	---	Noncemented Moderately cemented	0	---	Moderate	Mod
Cassyhill-----	Lithic bedrock	10-20	---	Indurated	0	---	Moderate	Low
784: Pinecreek, moist-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	---	High	Hig
Lotuspoint-----	Lithic bedrock	20-40	---	Indurated	0	---	Moderate	Mod
791: Latour-----	Strongly contrasting textural stratification	12-25	---	Noncemented	0	---	Moderate	Hig
800: Rock outcrop-----	Lithic bedrock	0-0	---	Indurated	0	---	---	---

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action
	Kind	Depth to top	Thickness	Hardness	Initial	Total
801: Pits, gravel-----	---	In ---	In ---	---	In 0	In ---
802: Kingspeak-----	---	---	---	---	0	Moderate
Urban land-----	---	---	---	---	0	---
900: Water-----	---	---	---	---	---	---
901: Aquandic Endoaquepts---	Strongly contrasting textural stratification	30-48	---	Noncemented	0	Moderate
Aquic Udifluvents-----	Strongly contrasting textural stratification	22-30	---	Noncemented	0	Moderate
902: Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	Moderate
903: Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	Moderate
Pinecreek-----	Strongly contrasting textural stratification	25-35	---	Noncemented	0	High
907: Honeyjones-----	Strongly contrasting textural stratification	19-35	---	Noncemented	0	High

Table 32.---Soil Features---Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	U
	Kind	Depth to top	Thickness	Hardness	Initial	Total	
908: Honeyjones-----	Strongly contrasting textural stratification	In 19-35	In ---	Noncemented	In 0	In ---	High
Ahrs-----	Strongly contrasting textural stratification	23-41	---	Noncemented	0	---	Moderate
913: Hobo-----	Strongly contrasting textural stratification	42-52	---	Noncemented	0	---	High
Ac1: Arson-----	Paralithic bedrock	48-60	---	Moderately cemented	0	---	Moderate
Carlinton-----	Fragipan	31-40	---	Noncemented	0	---	High
Ac2: Arson, dry-----	Paralithic bedrock	48-60	---	Moderately cemented	0	---	Moderate
Carlinton, dry-----	Fragipan	31-46	---	Noncemented	0	---	High
An4: Arson, dry-----	Paralithic bedrock	48-60	---	Moderately cemented	0	---	Moderate
Minaloosa, dry-----	Strongly contrasting textural stratification	10-20	---	Noncemented	0	---	Moderate
Rs2: Reggear, moist-----	Fragipan	24-39	---	Noncemented	0	---	High
Stewah-----	Strongly contrasting textural stratification Paralithic bedrock	10-20 53-60	---	Noncemented Moderately cemented	0	---	High

Soil Survey of Benewah County Area, Idaho, Western Part

Table 33.--Taxonomic Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Agatha-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxeralfs
Ahrs-----	Ashy-skeletal over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands
Aquandic Endoaquepts-----	Aquandic Endoaquepts
Aquic Udifluvents-----	Aquic Udifluvents
Ardenvoir-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts
Arson-----	Fine-loamy, mixed, superactive, frigid Vitrandic Haploxeralfs
Bechtel-----	Fine-loamy, mixed, superactive, frigid Vitrandic Hapludalfs
Bellslake-----	Coarse-silty, mixed, superactive, nonacid, frigid Aquandic Humaquepts
Benewah-----	Fine-silty, isotic, frigid Vitrandic Haploxeralfs
Blinn-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts
Bobbitt-----	Loamy-skeletal, isotic, mesic Vitrandic Argixerolls
Boulder creek-----	Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands
Cald-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Caldwell-----	Fine-silty, mixed, superactive, mesic Cumulic Haploxerolls
Carlinton-----	Fine-silty, mixed, superactive, frigid Vitrandic Fragixeralfs
Cassys Hill-----	Loamy-skeletal, isotic, mesic Lithic Ultic Haploxerolls
Chesley-----	Ashy over loamy, amorphic over mixed, superactive, frigid Alfic Udivitrands
DeVoignes-----	Fine-silty, mixed, active, nonacid, frigid Histic Humaquepts
Dorb-----	Ashy-skeletal over loamy-skeletal, glassy over isotic, frigid Typic Udivitrands
*Driscoll-----	Fine, mixed, superactive, mesic Aquic Palexerolls
Endoaquolls-----	Endoaquolls
Garfield-----	Fine, mixed, superactive, mesic Mollic Haploxeralfs
Grangemont-----	Fine-silty, mixed, active, frigid Andic Glossudalfs
Hobo-----	Ashy over loamy, amorphic over isotic, frigid Oxyaquic Udivitrands
Honeyjones-----	Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands
Huckle-----	Ashy over loamy-skeletal, amorphic over isotic, frigid Typic Udivitrands
Hugus-----	Ashy over loamy-skeletal, amorphic over isotic, frigid Alfic Udivitrands
Kauder-----	Fine-silty, mixed, active, frigid Andic Fragiudalfs
Kingspeak-----	Coarse-loamy, isotic, frigid Vitrandic Hapludalfs
Lacy-----	Loamy-skeletal, mixed, superactive, mesic Lithic Ultic Argixerolls
*Larkin-----	Fine-silty, mixed, superactive, mesic Pachic Ultic Argixerolls
Latah-----	Fine, mixed, superactive, mesic Xeric Argialbolls
Latahco-----	Fine-silty, mixed, superactive, frigid Argiaquic Xeric Argialbolls
Latour-----	Medial-skeletal, glassy Typic Haplocryands
Libertybutte-----	Loamy, mixed, superactive, mesic Lithic Argixerolls
Lotuspoint-----	Loamy-skeletal, isotic, mesic Andic Haploxerepts
Lovell-----	Fine-silty, isotic, frigid Aquandic Epiaqualfs
McCrosket-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxerolls
Miesen-----	Coarse-silty, mixed, superactive, frigid Vitrandic Humudepts
Minaloosa-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxerepts
Naff-----	Fine-silty, mixed, superactive, mesic Typic Argixerolls
Palouse-----	Fine-silty, mixed, superactive, mesic Pachic Ultic Haploxerolls
Pedee-----	Clayey-skeletal, isotic, frigid Vitrandic Palexeralfs
Pinecreek-----	Ashy over loamy-skeletal, glassy over isotic, frigid Humic Vitrixerands
Porrett-----	Fine-silty, mixed, active, frigid Aquandic Epiaqualfs
Pywell-----	Euic, frigid Typic Haplosaprists
Ramsdell-----	Coarse-silty, mixed, superactive, nonacid, frigid Aquandic Endoaquepts
Rasser-----	Loamy-skeletal, isotic, frigid Vitrandic Haploxeralfs
Reggear-----	Fine-silty, mixed, active, frigid Vitrandic Fraglossudalfs
Saint Maries-----	Loamy-skeletal, isotic, frigid Vitrandic Eutrudepts
Santa-----	Coarse-silty, mixed, superactive, frigid Vitrandic Fragixeralfs
Schumacher-----	Fine-loamy, mixed, superactive, mesic Ultic Argixerolls
Seddow-----	Fine-loamy, mixed, superactive, frigid Vitrandic Haploxeralfs
Setters-----	Fine, smectitic, frigid Ultic Palexerolls
Sharptop-----	Coarse-silty, isotic, frigid Vitrandic Haploxeralfs
Shayhill-----	Loamy-skeletal, isotic, frigid Vitrandic Hapludalfs
Sinkler-----	Fine-silty, mixed, superactive, frigid Vitrandic Haploxeralfs
Sly-----	Fine-loamy, mixed, superactive, frigid Vitrandic Hapludalfs

Soil Survey of Benewah County Area, Idaho, Western Part

Table 33.--Taxonomic Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
*Southwick-----	Fine-silty, mixed, active, mesic Vitrandic Argixerolls
Stewah-----	Coarse-loamy, mixed, superactive, frigid Vitrandic Hapludalfs
Taney-----	Fine-silty, mixed, superactive, frigid Vitrandic Argixerolls
Tekoa-----	Loamy-skeletal, mixed, superactive, mesic Vitrandic Argixerolls
Tensed-----	Fine-loamy, isotic, frigid Xeric Argialbolls
Thatuna-----	Fine-silty, mixed, superactive, mesic Oxyaquic Argixerolls
Threebear-----	Medial over loamy, amorphic over mixed, superactive, frigid Oxyaquic Udivitrands
Tigley-----	Loamy-skeletal, mixed, superactive, frigid Vitrandic Hapludalfs
Tilma-----	Fine, mixed, superactive, mesic Xeric Argialbolls
Typic Fluvaquents-----	Typic Fluvaquents

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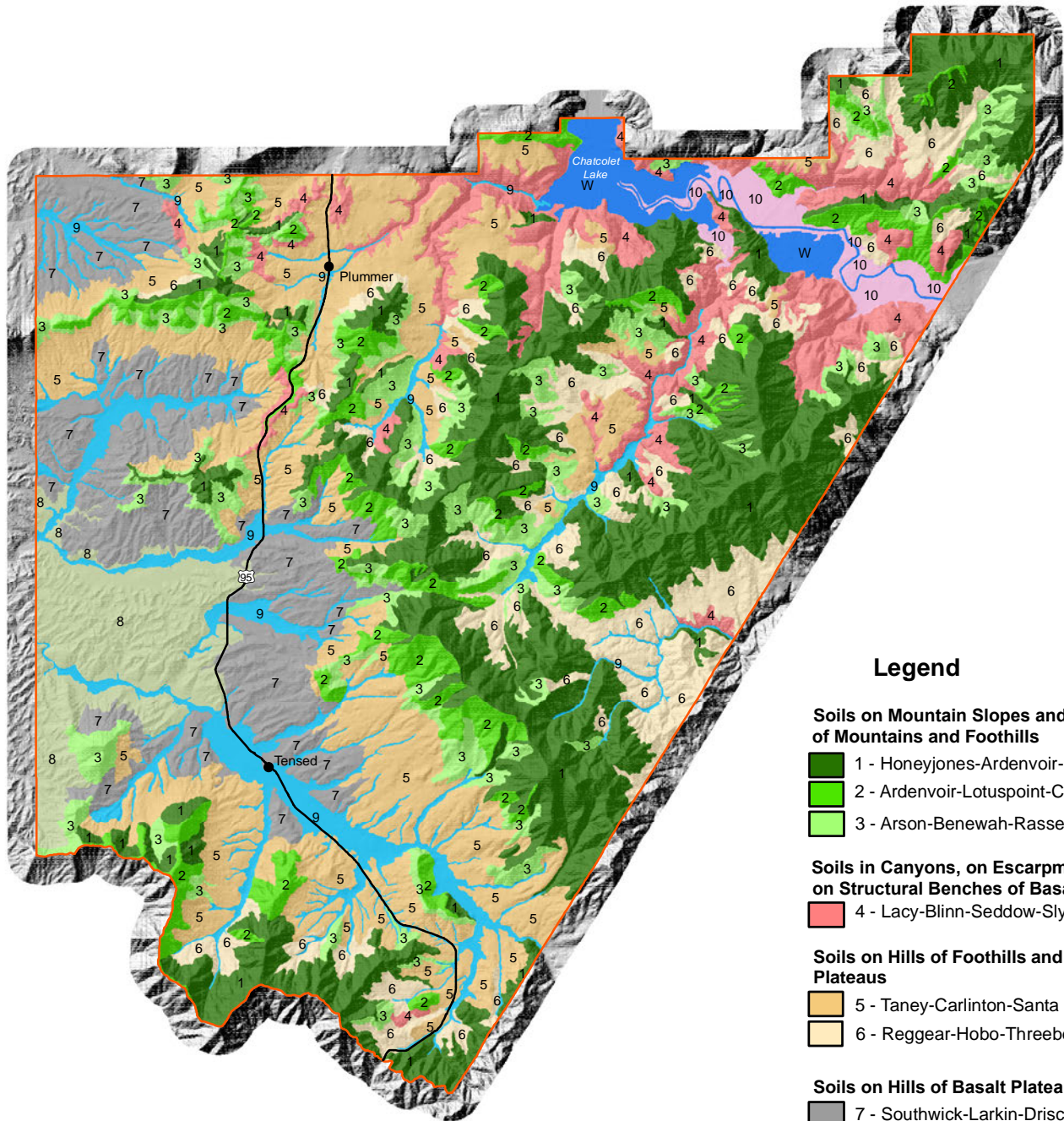
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GENERAL SOIL MAP

BENEWAH COUNTY AREA, IDAHO, WESTERN PART

United States Department of Agriculture, Natural Resources Conservation Service
Benewah Soil and Water Conservation District
Idaho Soil Conservation Commission
Coeur d'Alene Tribe
University of Idaho, College of Agriculture



Legend

Soils on Mountain Slopes and Hills of Mountains and Foothills

- 1 - Honeyjones-Ardenvoir-Huckle
- 2 - Ardenvoir-Lotuspoint-Cassyhill
- 3 - Arson-Benewah-Rasser

Soils in Canyons, on Escarpments, and on Structural Benches of Basalt Plateaus

- 4 - Lacy-Blinn-Seddow-Sly

Soils on Hills of Foothills and Basalt Plateaus

- 5 - Taney-Carlinton-Santa
- 6 - Reggear-Hobo-Threebear

Soils on Hills of Basalt Plateaus

- 7 - Southwick-Larkin-Driscoll
- 8 - Naff-Thatuna-Palouse

Soils on Flood Plains, Stream Terraces, and Drainageways of River Valleys and on Basalt Plateaus and Hills

- 9 - Latahco-Lovell-Cald
- 10 - Miesen-Ramsdell-Bellslake
- W - Water

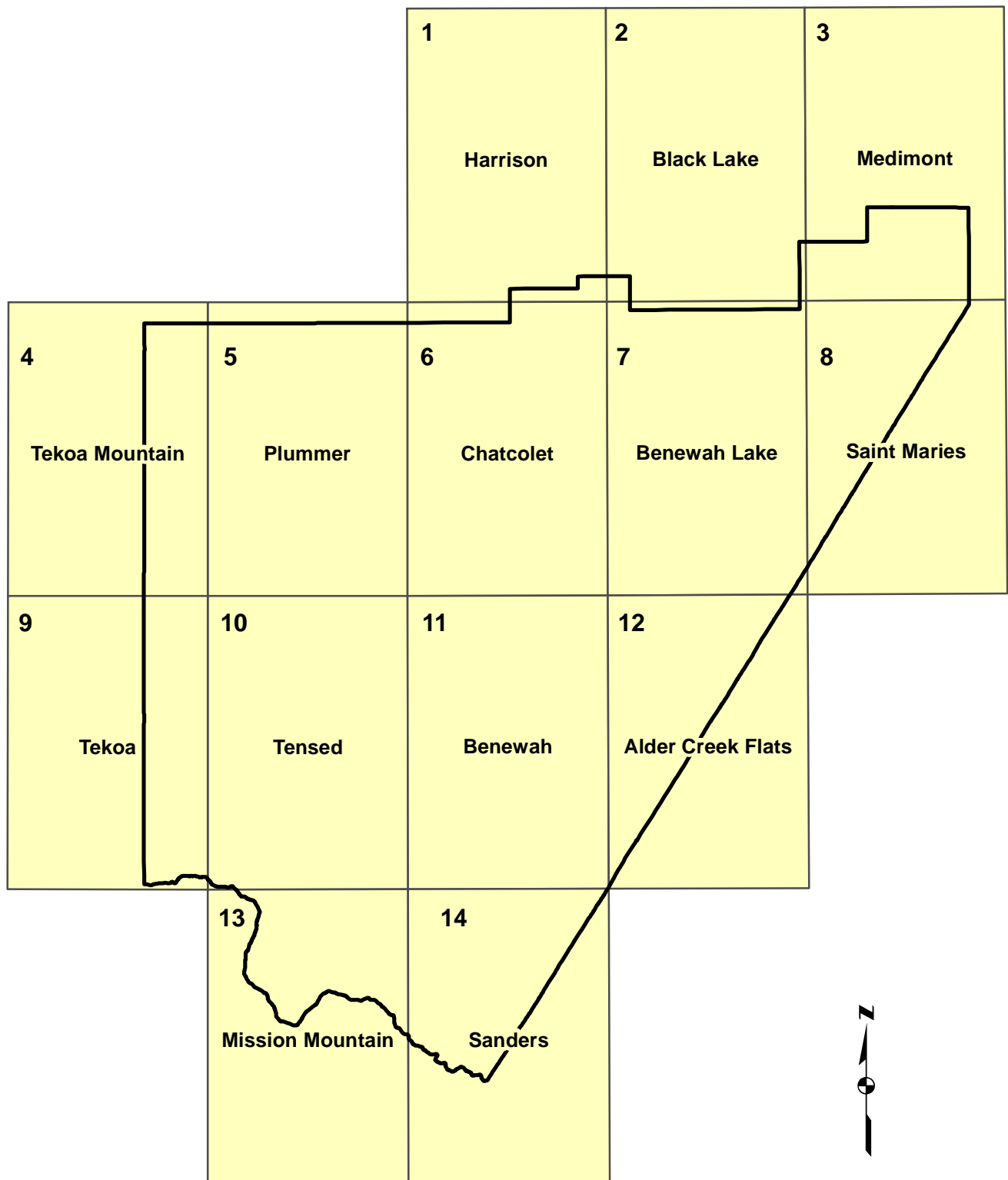
Scale 1:250,000

0 1.75 3.5 7 10.5 14 Kilometers

0 1.25 2.5 5 7.5 10 Miles

Index to Map Sheets

Benewah County Area, Idaho, Western Part





Join sheet 5,
Plummer

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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks; Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

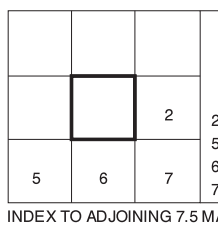
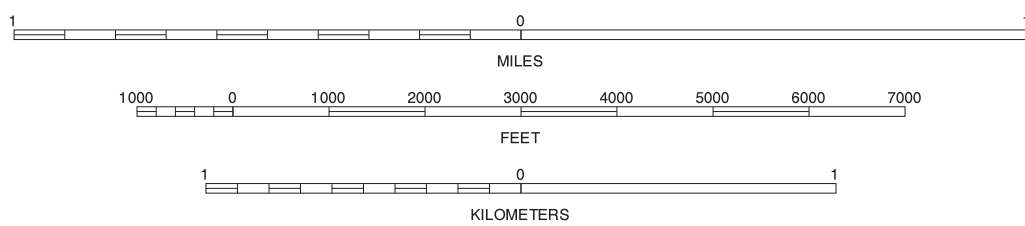
NORTH



QUADRANGLE LOCATION

Joins sheet 6, Chatcolet

SCALE 1:24000



- 2 BLACK LAKE
- 3 PLUMMER
- 4 CHATCOLET
- 5 BENEWAH LAKE

HARRISON, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 1 OF 14

Soil map delineations extending beyond the white quadrangle neckline are for reference only and are not included on adjacent map sheets.

Joins sheet 4, Tekoa Mountain

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

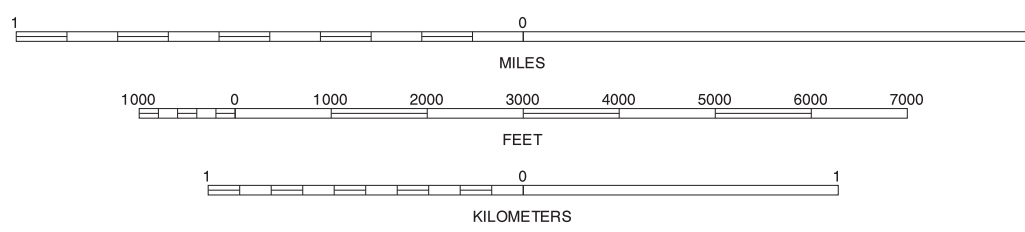
BENEWAH COUNTY AREA, IDAHO, WESTERN
TENSED QUADRANGLE
SHEET NUMBER 10 OF 14

Joins sheet 5, Plummer



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks. Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



4	5	6	4 TEKOA MOUNTAIN
			5 PLUMMER
			6 CHATOLET
9		11	9 TEKOA
			11 BENEWAH
	13	14	13 MISSION MOUNTAIN
			14 SANDERS

TENSED, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 10 OF 14

Soil map delineations extending beyond the quadrangle boundary are for reference only and are not included on adjacent map sheets.

Joins sheet 5,
Plummer

Joins sheet 6, Chatcolet



Joins sheet 13,
Mason Mountain

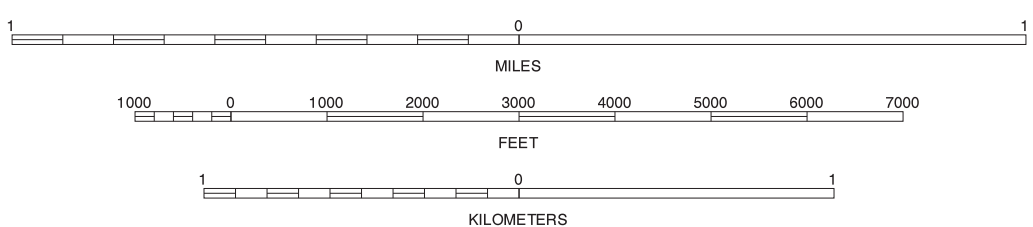
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NORTH



QUADRANGLE LOCATION



5	6	7	5 PLUMMER
			6 CHATCOLET
			7 BENEWAH LAKE
10		12	10 TENSED
			12 ALDER CREEK FLATS
			13 MASON MOUNTAIN
13	14		14 SANDERS

INDEX TO ADJOINING 7.5 MAPS

BENEWAH, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 11 OF 14

Soil map delineations extending beyond white quadrangle neatlne are for reference only and are not included on adjacent map sheets.

Joins sheet 6,
Coeur

Joins sheet 7, Benewah Lake

Joins sheet 11, Benewah

Joins sheet 14,
Sanders



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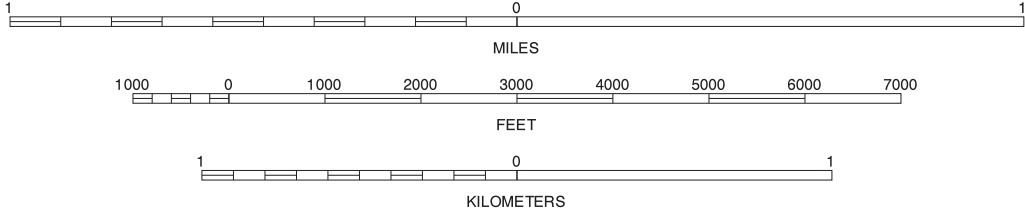
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NORTH



QUADRANGLE LOCATION

SCALE 1:24000



6	7	8	6 CHATOLET
			7 BENEWAH LAKE
			8 SAINT MARIES
11			11 BENEWAH
			14 SANDERS
14			

INDEX TO ADJOINING 7.5 MAPS

ALDER CREEK FLATS,
7.5 MINUTE SERIES
SHEET NUMBER 12 OF 14

Soil map delineations extending beyond white quadrangle neatlne are for reference only and are included on adjacent map sheets.



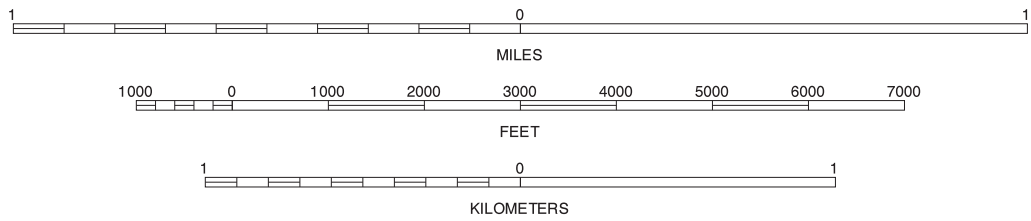
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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



SCALE 1:24000

9	10	11	9 TEKOA
			10 TENSED
			11 BENEWAH
			14 SANDERS

INDEX TO ADJOINING 7.5 MAPS

MISSION MOUNTAIN,
7.5 MINUTE SERIES
SHEET NUMBER 13 OF 14

Soil map delineations extending beyond the white quadrangle neeline are for reference only and are not included on adjacent map sheets.

Joins sheet 10,
Tensed

Joins sheet 11, Benewah



Joins sheet 13, Mission Mountain

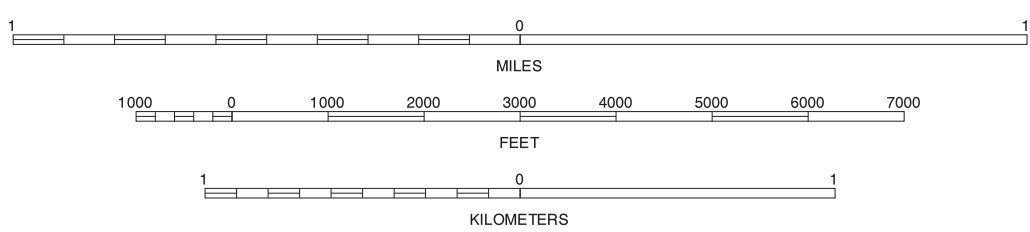
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NORTH



QUADRANGLE LOCATION

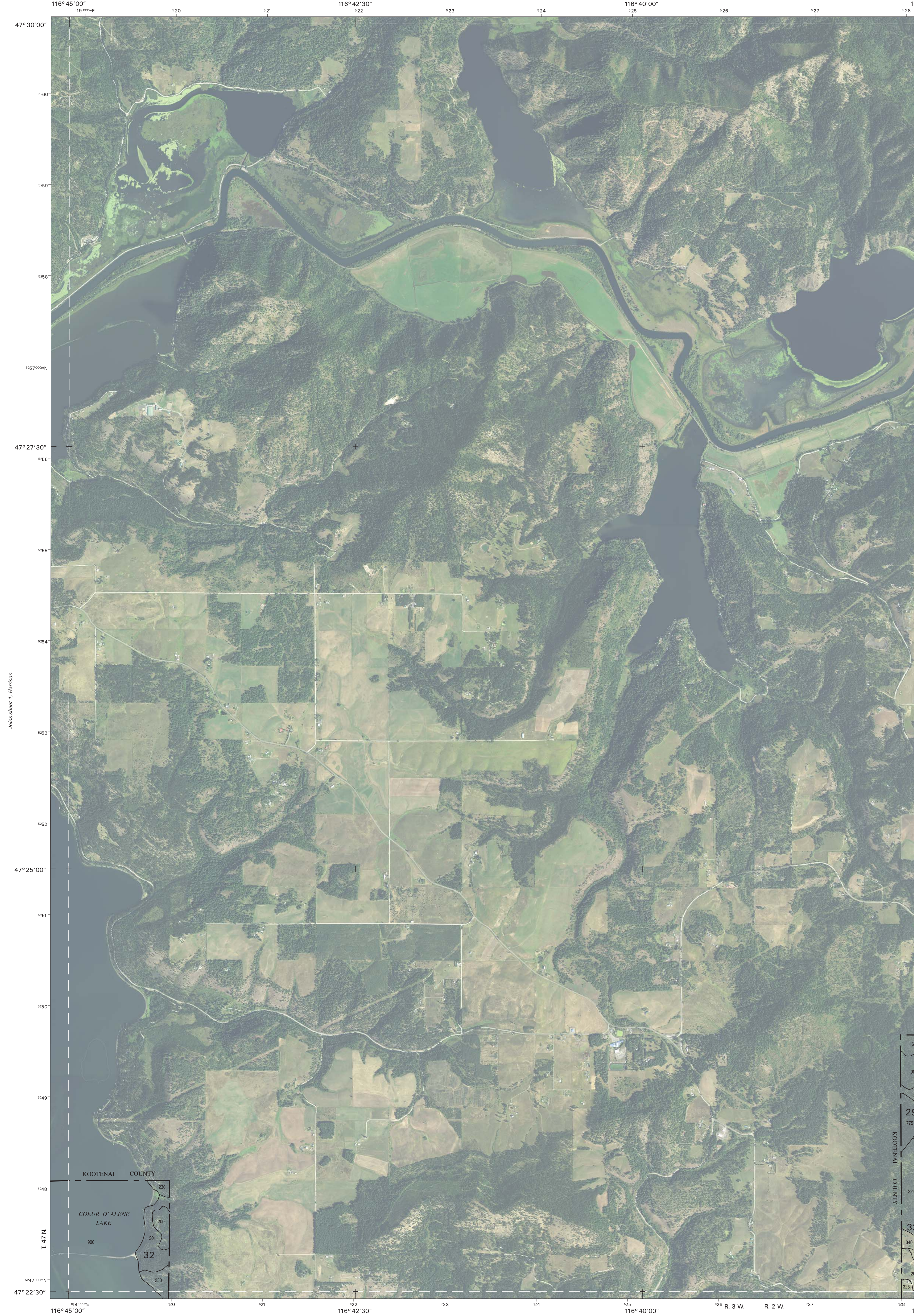


10	11	12	10 TENSED 11 BENEWAH 12 ALDER CREEK FLATS 13 MISSION MOUNTAIN
13			

INDEX TO ADJOINING 7.5 MAPS

SANDERS, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 14 OF 14

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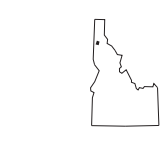
Joins sheet 1, Harrison

Joins sheet 6, Chatcolet

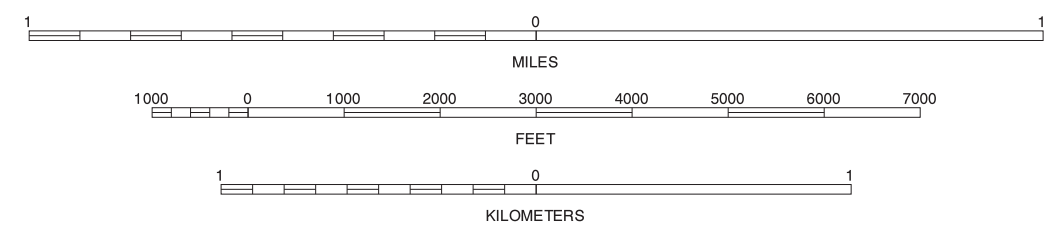
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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks. Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



1	3
6	8

INDEX TO ADJOINING 7.5 MAPS

- 1 HARRISON
- 3 MEDIMONT
- 6 CHATCOLET
- 7 BENEWAH LAKE
- 8 SAINT MARIES

BLACK LAKE, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 2 OF 14

Soil map delineations extending beyond white quadrangle neartline are for reference and are included on adjacent map sheets.



Joins sheet 7,
Benevah Lake

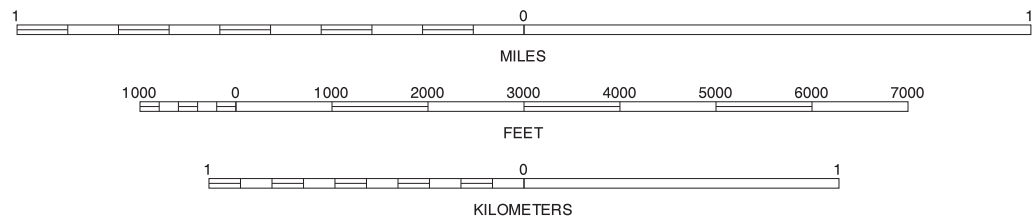
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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks; Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

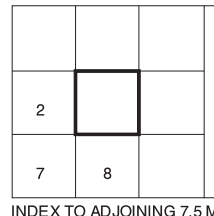


QUADRANGLE LOCATION



Joins sheet 8, Saint Maries

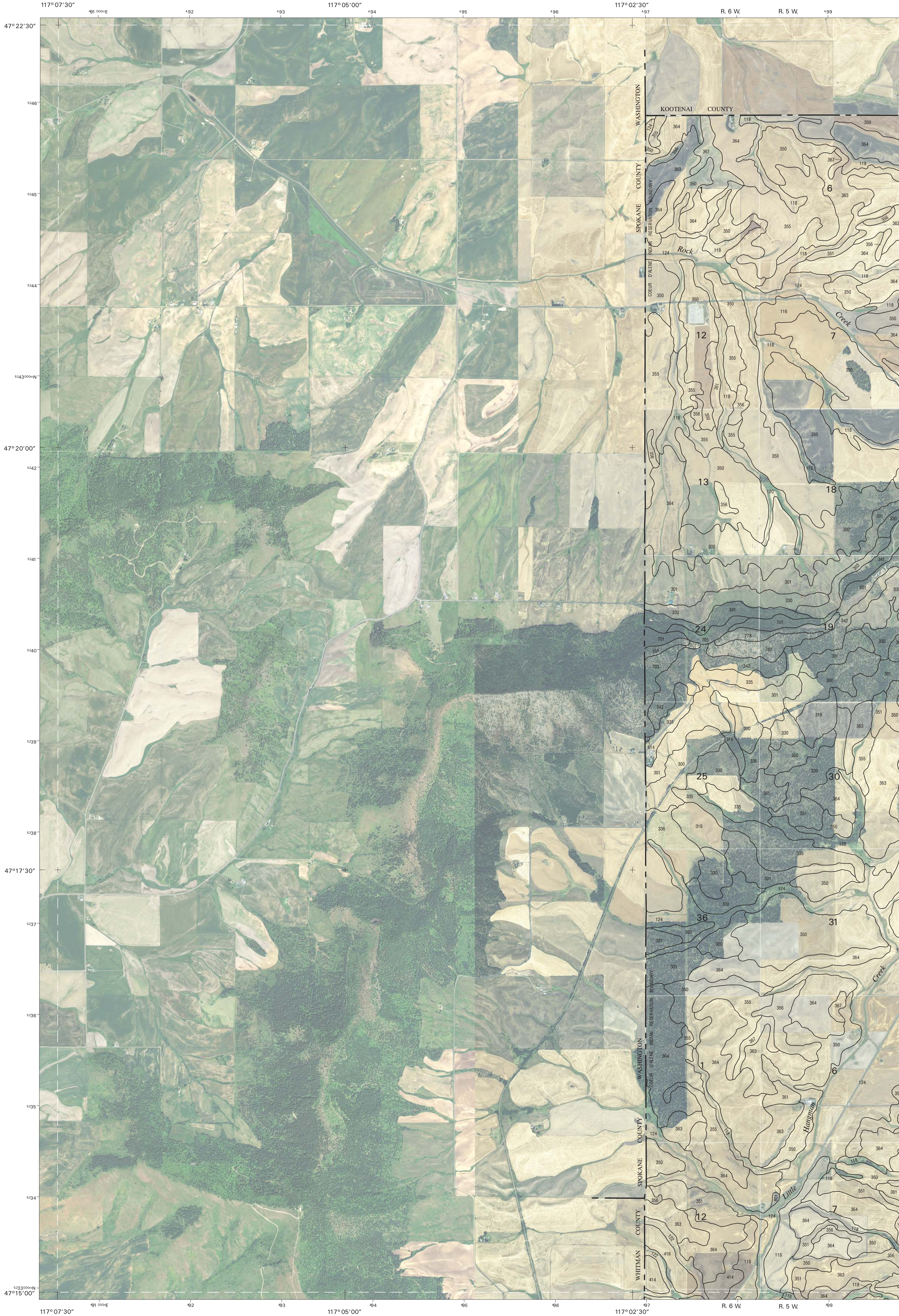
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INDEX TO ADJOINING 7.5 MAPS

MEDIMONT, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 14

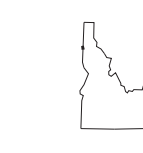
Soil map delineations extending beyond the white quadrangle neckline are for reference only and are not included on adjacent map sheets.



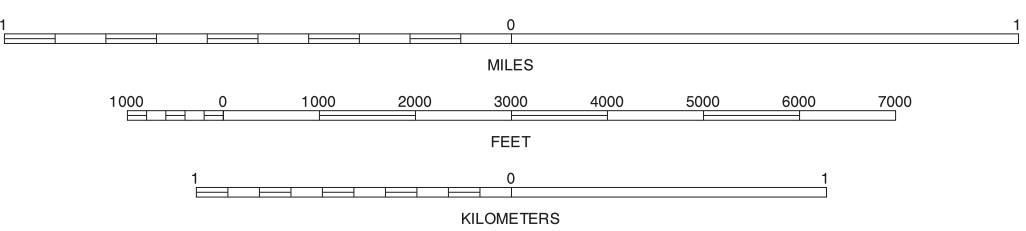
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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

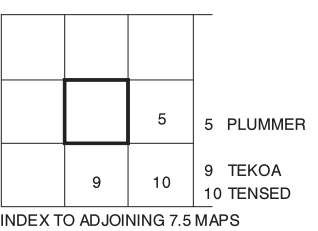


QUADRANGLE LOCATION



Joins sheet 9, Tekoa

SCALE 1:24000



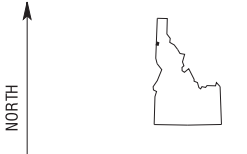
TEKOA MOUNTAIN,
7.5 MINUTE SERIES
SHEET NUMBER 4 OF 14

Soil map delineations extending beyond the white quadrangle neatline are for reference only and are not included on adjacent map sheets.

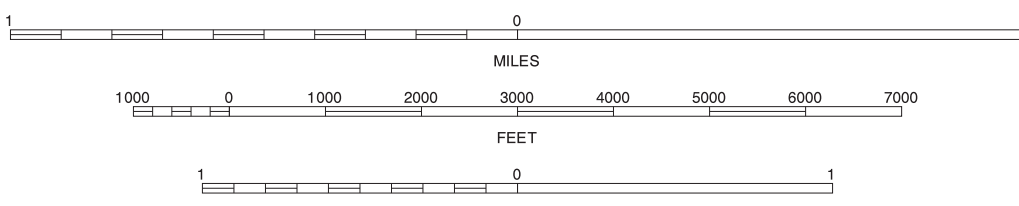


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service. Base maps are orthophotographs prepared by the U.S. Department of Agriculture, Farm Service Agency, from 2013 NIP aerial photography. Culture information were acquired from Bureau of Land Management and other sources. Cultural layers were edited to conform with features represented on the publication orthophotography and to enhance the clarity of the soils information.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1 000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



		1
4		6
9	10	11

- 1 HARRISON
- 4 TEKOA MOUNTAIN
- 6 CHATOLET
- 9 TEKOA
- 10 TENGED
- 11 BENEWAH

PLUMMER, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 5 OF 14

Soil map delineations extending beyond the white quadrangle neoline are for reference only and are not included on adjacent map sheets.

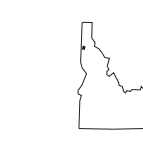


Joins sheet 10,
Tensed

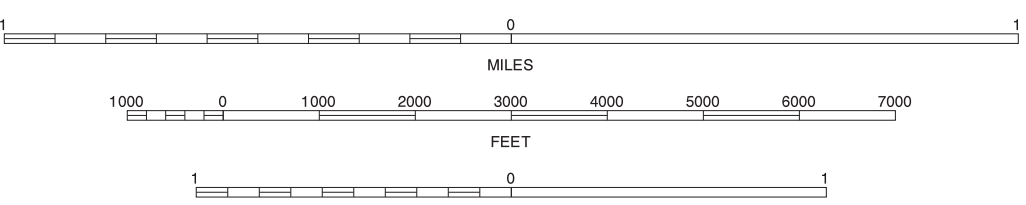
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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



Joins sheet 11, Benewah

SCALE 1:24000

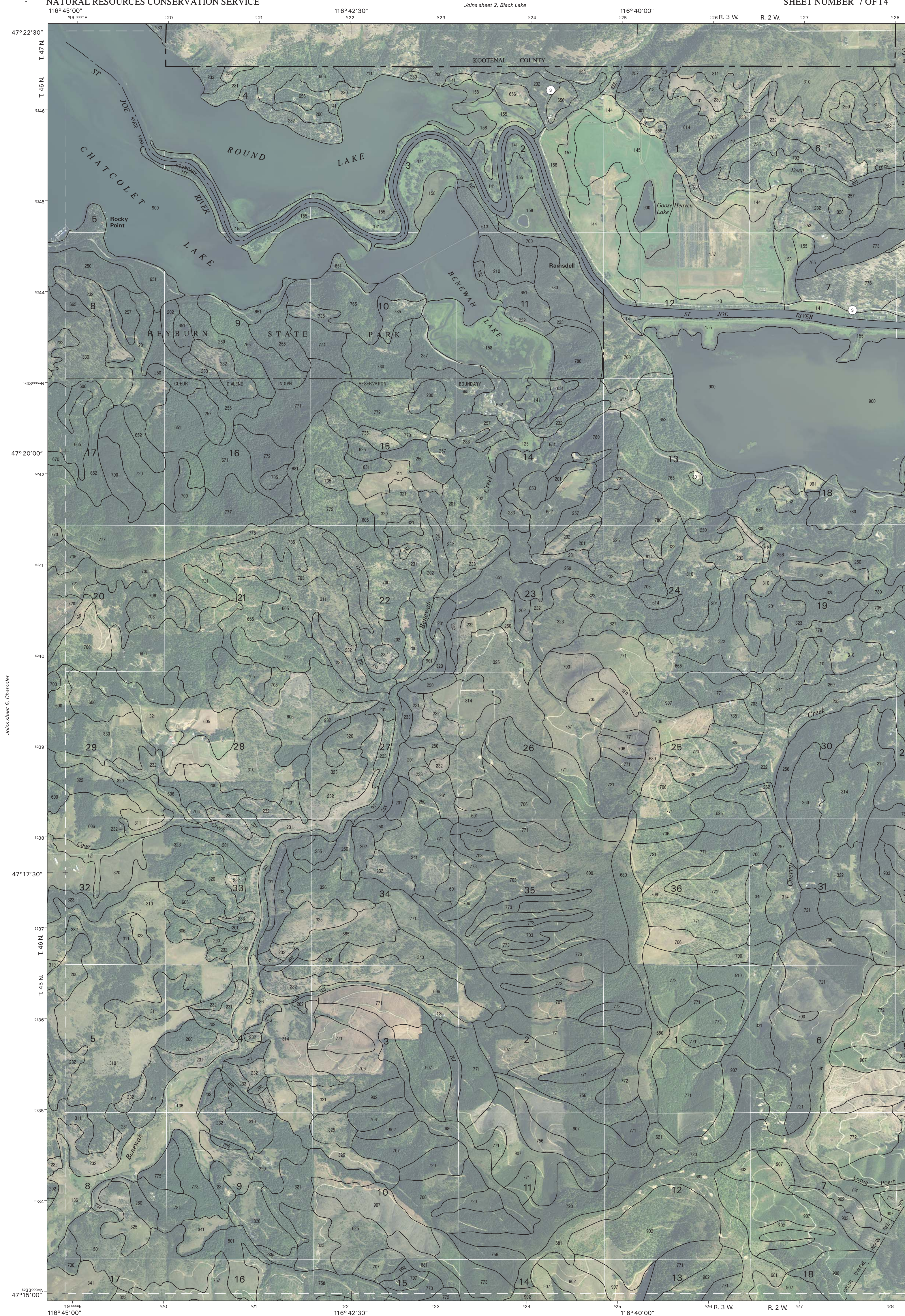
	1	2
5		7
10	11	12

- 1 HARRISON
- 2 BLACK LAKE
- 5 PLUMMER
- 7 BENEWAH LAKE
- 10 TENSED
- 11 BENEWAH
- 12 ALDER CREEK FLATS

INDEX TO ADJOINING 7.5 MAPS

CHATCOLET, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 6 OF 14

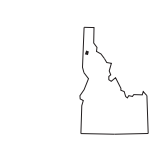
Soil map delineations extending beyond the white quadrangle neoline are for reference only and are not included on adjacent map sheets.



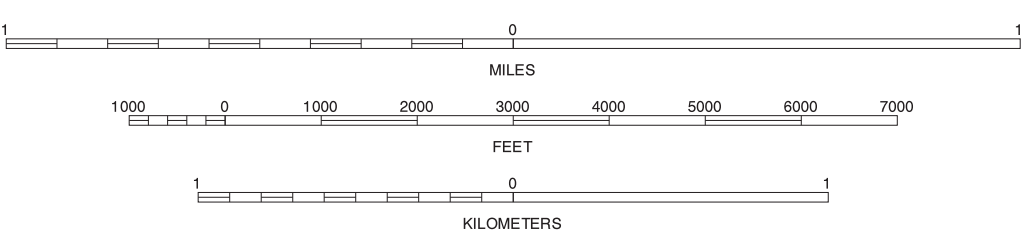
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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



SCALE 1:24000

1	2	3
6		8
11	12	

INDEX TO ADJOINING 7.5 MAPS

- 1 HARRISON
- 2 BLACK LAKE
- 3 MEDIMONT
- 6 CHATCOLET
- 8 SAINT MARIES
- 11 BENEWAH
- 12 ALDER CREEK FLATS

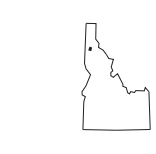
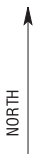
BENEWAH LAKE, ID
7.5 MINUTE SERIES
SHEET NUMBER 7 OF 14

Soil map delineations extending beyond white quadrangle neatlne are for reference only and are not included on adjacent map sheets.

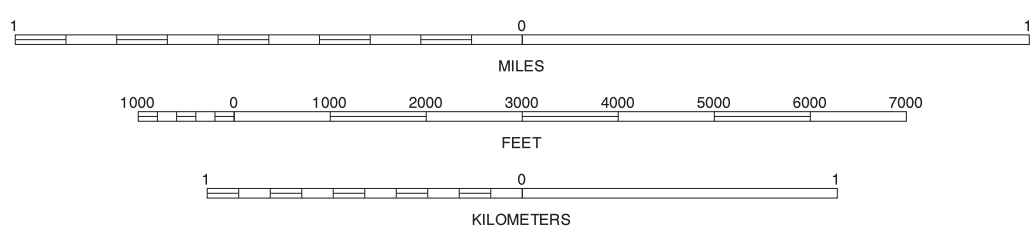


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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

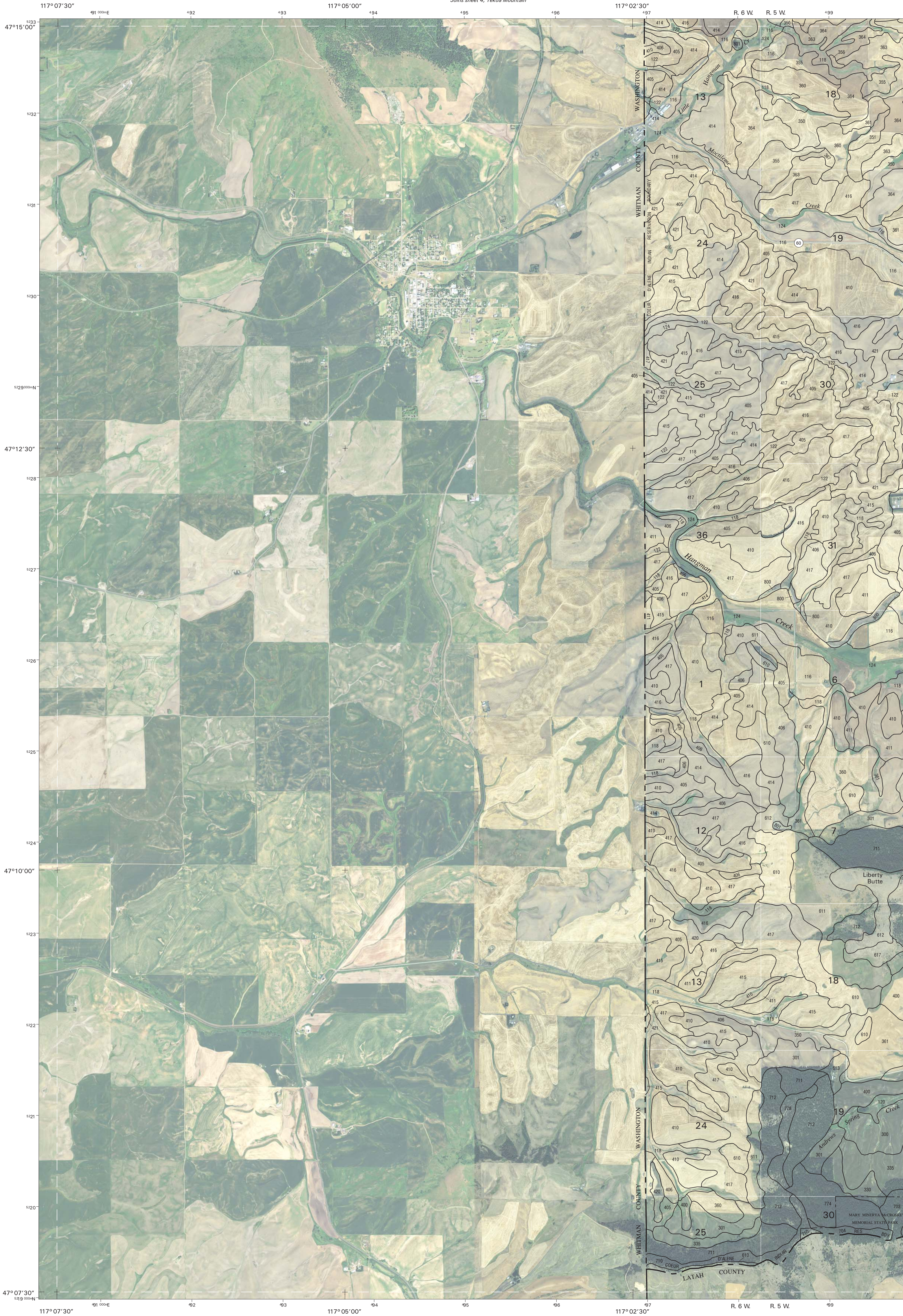


2	3		2 BLACK LAKE
			3 MEDIMONT
7			7 BENEWAH LAKE
			12 ALDER CREEK FLATS
12			

INDEX TO ADJOINING 7.5 MAPS

SAINT MARIES, ID
7.5 MINUTE SERIES
SHEET NUMBER 8 OF

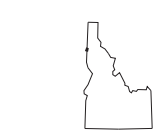
Soil map delineations extending beyond the white quadrangle neatline are for reference only and are not included on adjacent map sheets.



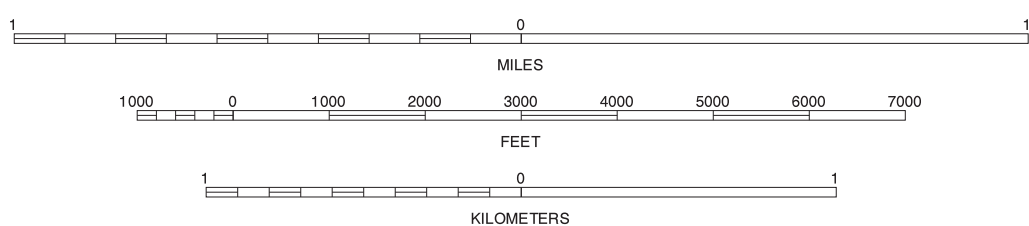
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NORTH



QUADRANGLE LOCATION



SCALE 1:24000

4	5	4 TEKOA MOUNTAIN
	10	5 PLUMMER
		10 TENSED
	13	13 MISSION MOUNTAIN

INDEX TO ADJOINING 7.5 MAPS

TEKOA, IDAHO
7.5 MINUTE SERIES
SHEET NUMBER 9 OF 14

Soil map delineations extending beyond white quadrangle neatline are for reference only and are not included on adjacent map sheets.

BENEWAH COUNTY AREA, IDAHO, WESTERN PART

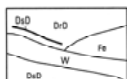
SOIL LEGEND

105	Aquic Udifluvents-Typic Fluvaquents complex, protected, 0 to 4 percent slopes	336	Carlinton, dry-Taney complex, 3 to 8 percent slopes	671	Honeyjones ashy silt loam, 15 to 35 percent slopes
116	Thatuna-Caldwell complex, 0 to 4 percent slopes	340	Arson-Lotuspoint complex, 10 to 40 percent slopes	680	Ardenvoir-Huckle complex, 5 to 20 percent slopes
118	Thatuna-Cald complex, 0 to 8 percent slopes	341	Sinkler-Arson complex, 10 to 40 percent slopes	681	Huckle-Ahrs complex, 5 to 20 percent slopes
120	Latahco silt loam, 0 to 2 percent slopes	342	Sinkler-Arson complex, dry, 10 to 40 percent slopes		
121	Latahco-Lovell complex, 0 to 3 percent slopes	350	Southwick ashy silt loam, 3 to 8 percent slopes	700	Ardenvoir-Huckle association, 35 to 65 percent slopes
122	Tilma-Latah complex, 0 to 8 percent slopes	351	Southwick ashy silt loam, 8 to 20 percent slopes	701	Ardenvoir-McCrosket association, 35 to 65 percent slopes
124	Caldwell-Cald complex, 0 to 3 percent slopes	353	Tensed-Pedee complex, 3 to 15 percent slopes	703	Ardenvoir, dry-Ardenvoir complex, 35 to 65 percent slopes
125	Lovell-Porrett-Aquandic Endoaquepts complex, 0 to 3 percent slopes	354	Tensed-Pedee complex, 15 to 35 percent slopes	704	Ardenvoir, dry-Ardenvoir complex, 15 to 35 percent slopes
130	Porrett ashy silt loam, 0 to 2 percent slopes	355	Southwick-Driscoll complex, 3 to 15 percent slopes	705	Ardenvoir-Rasser complex, 35 to 65 percent slopes
136	Lovell-Porrett complex, 0 to 2 percent slopes	356	Southwick-Driscoll complex, 15 to 25 percent slopes	706	Ardenvoir gravelly ashy silt loam, 35 to 65 percent slopes
141	Miesen ashy silt loam, 0 to 2 percent slopes	360	Larkin silt loam, 3 to 12 percent slopes	707	Huckle, dry-Ardenvoir complex, 35 to 65 percent slopes
142	Miesen-Ramsdell complex, 0 to 2 percent slopes	361	Larkin silt loam, 12 to 20 percent slopes	710	McCrosket-Ardenvoir association, 15 to 35 percent slopes
143	Miesen ashy silt loam, protected, drained, 0 to 2 percent slopes	363	Larkin-Driscoll complex, 3 to 12 percent slopes	711	McCrosket-Ardenvoir association, 35 to 65 percent slopes
144	Miesen-Ramsdell complex, protected, drained, 0 to 4 percent slopes	364	Larkin-Southwick complex, 3 to 12 percent slopes	712	McCrosket-Tekoa association, 35 to 65 percent slopes
145	Bellslake ashy silt loam, protected, drained, 0 to 1 percent slopes	367	Larkin-Driscoll complex, 12 to 25 percent slopes	716	Ahrs gravelly ashy silt loam, 15 to 35 percent slopes
150	Pywell muck, protected, drained, 0 to 1 percent slopes			720	Huckle ashy silt loam, 35 to 65 percent slopes
155	Ramsdell ashy silt loam, 0 to 2 percent slopes	400	Driscoll silt loam, 10 to 25 percent slopes	721	Huckle-Ardenvoir association, 35 to 65 percent slopes
156	Ramsdell ashy silt loam, protected, drained, 0 to 2 percent slopes	405	Thatuna-Naff complex, 8 to 25 percent slopes	735	Lotuspoint stony ashy silt loam, 35 to 65 percent slopes, stony
157	Ramsdell-DeVoignes complex, protected, drained, 0 to 2 percent slopes	406	Thatuna-Naff complex, 25 to 40 percent slopes	736	Lotuspoint, stony-Rock outcrop complex, 35 to 75 percent slopes
158	DeVoignes-Pywell complex, 0 to 1 percent slopes	410	Palouse-Naff complex, 3 to 8 percent slopes	756	Tigley gravelly ashy silt loam, 35 to 65 percent slopes
		411	Palouse silt loam, 8 to 25 percent slopes	757	Hugus ashy silt loam, warm, 30 to 65 percent slopes
200	Blinn ashy silt loam, 5 to 35 percent slopes, stony	414	Naff-Thatuna complex, 3 to 8 percent slopes	758	Tigley, moist-Hugus complex, 30 to 65 percent slopes
201	Blinn ashy silt loam, 35 to 65 percent slopes, stony	415	Naff-Tilma complex, 3 to 20 percent slopes	765	Saint Maries-Huckle complex, 35 to 70 percent slopes
202	Blinn-Bobbitt complex, 35 to 65 percent slopes, stony	416	Naff-Thatuna complex, 8 to 25 percent slopes	770	Pinecreek gravelly ashy silt loam, 35 to 65 percent slopes
210	Agatha ashy silt loam, 5 to 35 percent slopes, stony	417	Naff-Palouse complex, 8 to 25 percent slopes	771	Honeyjones ashy silt loam, warm, 35 to 65 percent slopes
212	Agatha gravelly ashy silt loam, 35 to 65 percent slopes, stony	420	Garfield-Tilma complex, 5 to 20 percent slopes	772	Honeyjones, warm-Ahrs complex, 35 to 65 percent slopes
230	Lacy, stony-Rock outcrop complex, 5 to 35 percent slopes	421	Naff-Garfield complex, 5 to 25 percent slopes	773	Honeyjones ashy silt loam, dry, 35 to 65 percent slopes
231	Lacy, very stony-Rock outcrop complex, 35 to 65 percent slopes			774	Pinecreek ashy silt loam, moist, 35 to 65 percent slopes
232	Lacy-Bobbitt complex, 5 to 35 percent slopes, stony	500	Hobo-Threebear complex, 5 to 30 percent slopes	775	Pinecreek gravelly ashy silt loam, moist, 35 to 65 percent slopes
233	Lacy-Bobbitt complex, 35 to 65 percent slopes, very stony	501	Hobo-Threebear complex, warm, 5 to 35 percent slopes	776	Cassychill very gravelly ashy silt loam, 35 to 65 percent slopes
250	Dorb cobbly ashy silt loam, warm, 35 to 70 percent slopes, stony	510	Honeyjones-Ahrs complex, 15 to 35 percent slopes	777	Boulder creek ashy silt loam, warm, 35 to 65 percent slopes
255	Shayhill ashy silt loam, 15 to 40 percent slopes, stony			778	Cassychill-Lotuspoint complex, 5 to 30 percent slopes
256	Shayhill gravelly ashy silt loam, 35 to 65 percent slopes, stony	600	Ardenvoir-Huckle association, 15 to 35 percent slopes	779	Boulder creek ashy silt loam, 35 to 65 percent slopes
257	Shayhill gravelly ashy silt loam, dry, 15 to 40 percent slopes, stony	601	Ardenvoir-McCrosket association, 15 to 35 percent slopes	780	Ardenvoir-Huckle-Saint Maries, dry complex, 35 to 65 percent slopes
260	Seddow ashy silt loam, 15 to 35 percent slopes	605	Benewah-Rasser complex, 5 to 15 percent slopes	781	Ahrs, moist-Honeyjones, warm complex, 35 to 75 percent slopes
261	Sly-Shayhill complex, dry, 30 to 60 percent slopes	606	Benewah-Rasser complex, 15 to 35 percent slopes	782	Ardenvoir, dry-Cassychill complex, 35 to 65 percent slopes
262	Seddow-Sly, dry complex, 30 to 55 percent slopes	610	Schumacher silt loam, 5 to 25 percent slopes	784	Pinecreek, moist-Lotuspoint complex, 35 to 65 percent slopes
		611	Schumacher-Tekoa complex, 25 to 45 percent slopes	791	Latour gravelly medial silt loam, 35 to 75 percent slopes
300	Taney ashy silt loam, 3 to 8 percent slopes	612	Libertybutte-Tekoa complex, 5 to 30 percent slopes		
301	Taney ashy silt loam, 8 to 20 percent slopes	613	Ardenvoir, dry-Lotuspoint complex, 5 to 30 percent slopes	800	Rock outcrop
303	Carlinton-Benewah complex, 8 to 20 percent slopes	614	Ardenvoir, dry-Lotuspoint complex, 30 to 65 percent slopes	801	Pits, gravel
304	Benewah-Santa complex, 8 to 20 percent slopes	617	Tekoa gravelly ashy silt loam, 15 to 40 percent slopes	802	Kingspeak-Urban land complex, 5 to 35 percent slopes
310	Santa ashy silt loam, 3 to 8 percent slopes	621	Huckle ashy silt loam, 15 to 35 percent slopes		
311	Santa ashy silt loam, 8 to 20 percent slopes	625	Huckle-Ardenvoir association, 15 to 35 percent slopes	900	Water
314	Sharptop-Santa complex, 8 to 20 percent slopes	650	Grangemont ashy silt loam, 5 to 25 percent slopes	901	Aquandic Endoaquepts-Aquic Udifluvents complex, 0 to 4 percent slopes
315	Setters silt loam, 3 to 20 percent slopes	651	Kingspeak-Shayhill, stony complex, 5 to 40 percent slopes	902	Ahrs gravelly ashy silt loam, 35 to 75 percent slopes
316	Setters-Taney complex, 3 to 20 percent slopes	652	Kingspeak ashy silt loam, 3 to 25 percent slopes	903	Ahrs-Pinecreek association, 35 to 75 percent slopes
320	Reggear ashy silt loam, 3 to 20 percent slopes	653	Kingspeak ashy silt loam, cool, 5 to 30 percent slopes	907	Honeyjones ashy silt loam, 35 to 75 percent slopes
321	Reggear ashy silt loam, moist, 3 to 20 percent slopes	655	Tigley gravelly ashy silt loam, moist, 15 to 35 percent slopes	908	Honeyjones-Ahrs association, 35 to 75 percent slopes
322	Reggear, moist-Sly complex, 3 to 25 percent slopes	656	Kingspeak ashy silt loam, dry, 5 to 30 percent slopes	913	Hobo ashy silt loam, 15 to 40 percent slopes
323	Bechtel-Reggear complex, 15 to 40 percent slopes	660	Threebear medial silt loam, 3 to 25 percent slopes		
325	Reggear-Sharptop, basalt substratum complex, 3 to 12 percent slopes	662	Threebear medial silt loam, warm, 3 to 25 percent slopes	Ac1	Arson-Carlinton complex, 8 to 35 percent slopes
326	Reggear-Seddow complex, 3 to 25 percent slopes	663	Threebear, warm-Porrett complex, 0 to 4 percent slopes	Ac2	Arson-Carlinton complex, dry, 8 to 35 percent slopes
330	Carlinton-Carlinton, dry complex, 3 to 20 percent slopes	665	Grangemont ashy silt loam, warm, 5 to 25 percent slopes	An4	Arson-Minaloosa complex, 25 to 60 percent slopes
335	Carlinton ashy silt loam, dry, 8 to 25 percent slopes	670	Honeyjones ashy silt loam, warm, 15 to 35 percent slopes	Rs2	Reggear-Stewah complex, 10 to 35 percent slopes

CONVENTIONAL SYMBOLS LEGEND

SOIL SURVEY FEATURES

SOIL DELINEATIONS AND LABELS



ROAD EMBLEMS

Interstate



Federal



State




Other




CULTURAL FEATURES

National, state or province 

County or parish 

Reservation (national or
state forest or park) 

Limit of soil survey (label) 

Public Land Survey
System Section Boundary 